TECHNOLOGY DEPT.

A National Newspaper for Every Branch of the Industry

Automotive Daily News

CARS · SHOP EQUIPMENT · TRUCKS · AVIATION · PARTS · ACCESSORIES · TIRES

PUBLIC LIBRARY DETROIT

First Copy

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Employment in Automotive Plants High During August; Airplane Industry Active

By FRANCIS P. DAILY

WASHINGTON, Sept. 19.—The reports received by the United States Employment Service today revealed that a generally satisfactory industrial employment situation prevailed throughout August.

While the usual summer curtailment of activities continued in a number of the manufacturing centers, this recession has not been as great as that apparent in recent years and a large volume of employment was maintained. Employment remained at a high level in the majority of the automobile factories and in the plants manufacturing automobile accessories, though some of these establishments reported some curtailment of operations while necessary changes were being made in preparation for the production of fall and winter models.

Iron and steel mills operated on an unusually high level for this period of the year and while there was a slight let-up in production in some of the iron and steel centers, a large volume of employment was maintained in this industry. The metal working establishments continued capacity operations with few exceptions, and shortages of skilled workers such as tool and die makers, machine operators, experienced machine hands, and draftsmen were reported in some localities.

High production and employment schedules continued in the airplane industry. Condensed reports by manufacturing states and principal cities follow:—

MICHIGAN

GENERAL—There was an increase in the volume of employment during the past thirty days; however, the automobile factories curtailed their production schedules somewhat.

DETROIT INDUSTRIAL DISTRICT—The surplus of labor in this district included metal trades workers. All plants were in operation, and, while there has been the usual summer curtailment in employment, the fall outlook is bright.

GRAND RAPIDS—While several plants were closed, a number reported overtime schedules.

FLINT—A small surplus of automobile factory labor was apparent and a large number of transient workers were seeking employment in this city.

BAY CITY—A plant manufacturing automobile bodies and an automobile factory worked overtime.

ALBION—A surplus of automobile factory labor existed. Practically all plants were in operation.

BENTON HARBOR—While a slight curtailment was reported in plants manufacturing automobile castings, some improvement is expected early in September.

JACKSON—The surplus of labor apparent consisted principally of unskilled workers. Local factories worked on fairly satisfactory schedules in most instances.

OHIO

GENERAL—Satisfactory operations were maintained in the majority of the large industrial establishments. Plants manufacturing rubber tires and tubes kept their forces well engaged. The iron and steel mills operated at a high level for this period of the year.

DAYTON—A shortage of skilled mechanics was reported. A surplus of unskilled labor obtained.

CLEVELAND—The steel mills reported normal schedules.

CINCINNATI—Industrial district, including Norwood, a shortage of machinists, machine hands and experienced radio-factory workers was reported.

COLUMBUS—Some seasonal curtailment was noted in the industrial establishments.

TOLEDO—There was a general surplus of labor apparent throughout the month, but more particularly of automobile-factory workers. All plants were in operation, many with curtailed forces.

AKRON—The major rubber factories worked overtime and expect to continue on the schedule indefinitely.

YOUNGSTOWN—The iron and

(Continued on Page 2)

494,000 Tons Rubber Used In U. S. During Fiscal Year

Special from A. D. N. Washington Bureau

WASHINGTON, Sept. 19.—During the year ended June 30, last, the United States consumption of rubber amounted to about 494,000 tons and the total deliveries to foreign manufacturers amounted to about 289,000 tons, a grand total of 783,000 tons, the rubber division of the Department of Commerce disclosed today.

At the same time, E. G. Holt, chief of the division, announced that the import price for August averaged 20.02 cents a pound at New York and 19.31 cents a pound at Boston.

A total of 62,648,019 pounds, valued at $12,539,065, was imported during the month at New York and 3,532,222, valued at $682,193, at Boston, accounting for about 96 per cent. of the total for the United States.

In the year ended June 30, the total net exports of rubber from producing countries amounted to about 817,000 tons, according to official statistics.

Stocks of rubber in the United States appear to have declined slightly in the last two months, and stocks of rubber afloat between producing and manufacturing countries have now returned to about normal levels.

Stocks in Malaya have increased generally, the estates, mainland dealers and Singapore dealers reporting increased total stocks for May, June and July. London stocks are now beginning to increase; during the past quarter London stocks have not fluctuated much.

Total world stocks of rubber at the end of June, 1929, appear to be almost exactly the same as at the end of December, 1928, around 296,000 tons, indicating a close balance between production and consumption during the first half of 1929.

FIRST RUXTON DISTRIBUTOR APPOINTED IN CONNECTICUT

New York, Sept. 19.—The New Era Motors, Inc., today announces that it has appointed its first Ruxton distributor. The Connecticut Ruxton Company, Inc., 1726 Fairfield Ave., Bridgeport, Conn., has been formed with Robert F. Weed, president, with territory extending throughout the state. The distributor has appointed W. B. Wench of 280 Madison Ave., Greenwich, as the first dealer.

General Motors Buys North East Electric Company for $13,000,000

Jarrard of Marmon Finds Business Healthy In Southwest Region

San Antonio, Tex., Sept. 19.—There is a bright outlook for the automobile business in the Southwest during the next ninety days in the opinion of Thomas E. Jarrard, general sales director of the Marmon Motor Car Company, who arrived here yesterday on a trip through this section.

T. E. Jarrard

Since leaving the factory in Indianapolis Mr. Jarrard has visited Denver, Albuquerque, N. M., and El Paso. Throughout the mountain region he reports a generally good feeling in mining, agriculture and wholesale trade, and, with the exception of a few dull spots in retail trade, indications point to continued satisfactory conditions, particularly as applied to automobile sales in south Texas.

Business conditions reveal a distinct improvement, the Marmon general sales director said, and automobile dealers are confident their sales will show a healthy increase in the coming three months as far as sales of Marmon and Roosevelt cars are concerned. Mr. Jarrard expressed himself as highly pleased with the progress that has been made by the entire line, and he predicted a further gain in business as the natural result of a greatly augmented distributor and dealer organization in this section. Mr. Jarrard will leave here shortly to continue his journey to Houston, New Orleans, Shreveport and Dallas.

ROAD BUILDING FALLING BEHIND CAR PRODUCTION

Washington, Sept. 19.—With the sum of approximately $1,300,000,000 to be expended this year by state and local governments on highway building, the amount of new roadway as compared with the number of new cars is falling far behind, according to a statement by Thomas P. Henry, president of the American Automobile Association.

Mr. Henry declared that the ratio of road building to automobile production is showing a consistent decline annually and that preliminary reports for the 1929 touring season show that the condition of overcrowding on the highways was considerably worse than a year ago. Mr. Henry particularly attacked the "buggy rider" or the self-satisfied safe driver who travels at 20 miles an hour.

E. M. LYONS RE-ELECTED PRESIDENT OF N. P. A.

Atlantic City, N. J., Sept. 19.—Edward M. Lyons of Warren, Pa., has been re-elected president of the National Petroleum Association by the board of trustees of the association, meeting at the Hotel Traymore.

The trustees also re-elected P. S. Tarbox, Oil City, Pa., first vice-president; N. H. Weber, Chicago, second vice-president; Fayette B. Dow, Washington, D. C., general counsel; Willis Crane, Washington, D. C., traffic attorney; Herbert G. Earon, Warren, Pa., recording secretary; E. W. Smiley, Warren, Pa., assistant recording secretary, and G. B. Hunter, Emlenton, Pa., treasurer.

INTRODUCES MEASURE FOR $3,000,000,000 FEDERAL ROAD FUND

Washington, Sept. 19.—Representative William P. Holaday (Dem.), of Illinois yesterday proposed to saddle on the motor vehicle owners of the country the sale of $3,000,000,000 in government bonds for highway construction, the bonds to be retired through a special tax of motor vehicles and gasoline.

He has introduced in the House a bill authorizing construction of a vast network of hard-surfaced highways, including seven from the Atlantic seaboard to the Pacific Coast. His gigantic program would supplant the present Federal aid system.

Holaday's bill calls for construction of nine direct roads from the Canadian border to the Gulf of Mexico and the Mexican border, with other roads running diagonally across the country. He said his bill was modeled after the highway plan of Illinois. There the state reimburses counties for highways used in state-wide arteries.

UNIFORM TRAFFIC RULES SOUGHT BY A. A. A. CHIEFS

Philadelphia, Sept. 19.—Intensification of effort to bring about nation-wide adoption of uniform motor traffic rules was agreed upon by the executive committee of the American Automobile Association meeting this week at the home of Robert P. Hooper, Chestnut Hill, this city. Thomas P. Henry, national president, A. A. A., who presided over the two-day sessions, said that diversity of traffic rules is one reason why motor accidents occur, adding that this diversity causes a loss of many millions of dollars annually to American merchants, through unnecessary delays in motor deliveries.

Thomas P. Henry

"Wherever one goes by water," said Mr. Henry, "exactly the same rules prevail, whether one is aboard a sampan in a Japanese port, or a launch on an African river. But every American municipality seems to think it must have automobile traffic rules all its own."

BOHN AND WILCOX-RICH DISCUSS MERGER TERMS

Detroit, Sept. 19.—It is reported preliminary negotiations are under way for a merger of Bohn Aluminum and Brass Corporation and the Wilcox-Rich Corporation. Both companies are leading manufacturers of automobile parts and are active in aviation parts business. Bohn in the first six months this year reported net profits of $1,781,579, after charges and taxes, or $5.08 a share earned on 350,831 shares of no par value capital stock.

During the same period Wilcox-Rich reported net profits of $1,000 871 after charges and taxes.

NASH DISTRIBUTORS VIEW NEW MODELS

Kenosha, Wis., Sept. 19.—A three-day conference of Nash distributors from United States and Canada, with 125 men attending, ended here today.

A display of the new Nash series was a feature of the conference. Among the speakers were C. W. Nash, M. H. Pettit, W. H. Alford, C. H. Bliss, E. J. Travers and F. R. Babcock.

ACQUIRES PLANT IN ROCHESTER, N. Y.

Plan for Exchange of Stock Approved by N. E. Holders

ROCHESTER, Sept. 19.—Acquisition of the North East Electric Company and its subsidiaries by the General Motors Corporation, at a cost of $13,000,000, was announced here today, following a meeting of North East stockholders, at which the deal was ratified.

The merger will be effected by the exchange of stock, with four shares of General Motors preferred being given for five shares of North East preferred and two shares of General Motors common being exchanged for three shares of North East common.

The purpose of the acquisition of North East was to expand the manufacturing facilities of General Motors in the electrical field, and it is the plan of General Motors to continue the operation of the plants and to manufacture therein automotive and electrical equipment, Alfred P. Sloan, Jr., president, declared in a statement made public after the North East stockholders' meeting today.

Mr. Sloan also stated that the payment will consist of 40,000 shares of General Motors 7 per cent. preferred stock and 106,000 shares of common stock, which at current market prices represents approximately $13,000,000.

Announcement of the acquisition was also made by William A. Montgomery, president of North East. It was stated that he and James J. Stafford, secretary of North East, would retire.

From its founding, in 1908, to the present, the development of the North East Electric Company has been so rapid and so widely extended as to color its history with that tinge of romance that attaches itself to the far-seeing and successful pioneers in the world of industry and commerce.

First organized on October 22, 1908, as the Rochester Coil Company, it occupied 3,100 feet of floor space in the basement at 187 North Water St., at a rental, including power used, of $30 per month. Its invested capital was $5,000; it had three employees, and it manufactured coils and repaired electric motors.

In August, 1909, the company be-

(Continued on Page 12)

NEW TREATY WOULD OPEN NEW AUTOMOBILE MARKETS

Washington, Sept. 19.—The Senate now has under consideration a treaty which, if ratified, will open new foreign markets for thousands of American made automobiles annually, according to sponsors of the treaty.

This treaty, drawn in 1927 and signed by twenty-nine nations, would abolish import and export restrictions in these countries. Senator Vandenberg of Michigan said ratification of the treaty and the lifting of present import restrictions by certain foreign countries would widen the American market for other products as well as motor cars. Immediate ratification is expected.

Employment in Automotive Plants High During August

(Continued from Page 1)

steel mills reported schedules fairly satisfactory for this period of the

WISCONSIN

GENERAL—While there was some slight curtailment in several lines during August, it was entirely seasonal and less in volume than that usually apparent at this time of the year. This was also true of the automotive industry.

MILWAUKEE—Iron and steel production was at a high level for this season of the year.

RACINE—A surplus of semi-skilled and unskilled labor obtained.

KENOSHA—Except for a slight surplus of automobile factory labor, resident workers were well employed. Some seasonal curtailment of activity was noted in the automobile industry. However, this will be eliminated during September.

INDIANA

GENERAL—The major industries operated with fairly satisfactory schedules in force in most instances.

INDIANAPOLIS — The resident labor supply and demand were well balanced, except for some scarcity of skilled workers.

EVANSVILLE—Toward the close of the month there was an upward trend noted in the industrial situation and the employment outlook was better than during the past several weeks.

ELKHART—While all plants were in operation there was not sufficient employment offered to absorb all workers.

FORT WAYNE—A shortage of skilled metal-trades men and machinists existed throughout the month.

SOUTH BEND—There was some unemployment apparent among factory workers. However, this is not unusual during the midsummer period.

KOKOMO—While all plants were in operation, a small surplus of unskilled labor obtained.

ILLINOIS

CHICAGO—Although the usual summer curtailment prevailed in local factories, there was a slight improvement in the industrial employment situation.

MOLINE—While there was a very little change in the industrial employment situation, indications point to an increase in factory employment during the fall.

MASSACHUSETTS

There was some improvement in the industrial situation, with a corresponding increase in employment, while curtailed schedules obtained in the rubber industry, additional workers were employed.

HAVERHILL—Practically all manufacturing plants were in operation, but on curtailed schedules. Very little building reported.

NEW BEDFORD—All plants were in operation and overtime schedules were reported in three tire-fabric mills.

BOSTON—There was an improvement in the rubber industry in Malden and the forces employed in these factories were materially increased.

SPRINGFIELD—One plant manufacturing motorcycles operated on a curtailed basis.

RHODE ISLAND

There was an improvement in the industrial employment situation.

PROVIDENCE—There was a material reduction in the surplus of semi-skilled and unskilled labor previously reported.

CONNECTICUT

The industrial employment situation was described as satisfactory.

NEW HAVEN—The majority of the local plants operated at capacity.

HARTFORD—All plants operated at capacity, several reporting departmental overtime.

BRIDGEPORT—A shortage of skilled metal tradesmen continued throughout the month. All plants were in operation, the majority at capacity.

NEW YORK

There was a slight increase in manufacturing activity and employment in several of the major industries during August. A high level of employment was reported in the majority of the automobile factories, although several of these plants were still operating on somewhat seasonally curtailed schedules. Employment in the airplane industry continued at a high level, and there was an increase in the demand for skilled help.

NEW YORK CITY—plants manufacturing automobiles and automobile accessories reported slightly seasonally curtailed schedules.

BUFFALO—Manufacturing activity and employment were maintained at a high level throughout the month. While there was a seasonal curtailment apparent in the automobile and allied industries, this was offset by increased activity in other major establishments. The airplane industry engaged additional help and a new plant manufacturing airplane motors started production, which further increased the demand for skilled mechanics.

SYRACUSE—Practically all industries operated on full-time schedules. Employment in the steel mills showed a substantial improvement and these plants operated with day and night shifts engaged. The automobile industry worked full time, with full forces employed. Gear-manufacturing plants worked full time, but curtailed their forces.

ROCHESTER — A shortage of skilled automobile body workers and of machinists, tool and die makers and draftsmen was reported

ALBANY—The local industries operated on full-time schedules in most instances, and a satisfactory volume of employment was maintained in the majority of the industrial establishments.

YONKERS—Departmental overtime was reported in the automobile industry and in the wire and brass manufacturing plants. Work was started on the erection of a $2,000,000 automobile factory addition at Tarrytown.

TROY—Plants manufacturing automobile accessories reported normal operations and several engaged additional workers.

ELMIRA—Several departments of the automobile manufacturing plants worked part time.

NEW JERSEY

There was a slight let-up in production and employment in the rubber industries. The iron and steel mills kept their forces well employed.

NEWARK—The usual mid-summer seasonal curtailment of manufacturing activity was apparent in several industries, which temporarily affected employment and decreased the demand for factory help.

JERSEY CITY—The industrial employment situation was described as satisfactory.

TRENTON—Fairly satisfactory operations and employment were reported in the major industries.

PENNSYLVANIA

The industrial employment situation existing throughout the state during August was described as generally satisfactory for this period of the year.

PHILADELPHIA — There were slight seasonal curtailments of operations in several factories, but in most instances the volume of employment remained practically unchanged and the employment outlook for the next thirty days is bright.

PITTSBURGH—The major industries maintained an unusually high rate of activity, and the employment situation was regarded as satisfactory. There was a slight let-up in production in several branches of the iron and steel industry, but there was very little decline in employment. Operations and employment in the plate glass industry continued at a fairly high level for this period of the year.

BETHLEHEM — Operations and employment in the iron and steel mills were at an unusually high level for August. Employment in the textile industry continued satisfactory, and several of these factories worked overtime. There was practically no surplus labor apparent except among building trades men.

STRAUS SURVEY SHOWS DECLINE IN BUILDING

New York, Sept. 19.—Unmistakable signs of a slowing down in building construction were in evidence in the reports made to S. W. Straus & Co. of plans filed or permits issued in August in 577 comparable principal cities and towns in the United States.

The completeness of this survey, covering every state, may be taken as a barometer in the building industry for the next sixty to ninety days. These 577 cities doing a volume of $256,720,837 in construction in August showed a loss of 18 per cent. from August a year ago and 11 per cent. from July of this year. The volume for these cities in August last year was $314,551,218 and for July, 1929, the volume in these cities was $287,497,821.

For the fourth consecutive month the Straus survey showed losses in building volume for the more than 500 cities covered in its reports. The loss over the same month a year ago was for July, 13 per cent.; for June, 29 per cent., and for May, 19 per cent.

New Dealers Appointed

INDIANA

Marmon-Roosevelt—Union County Auto Sales, Liberty; J. A. Schellenger, Bloomfield.

Hupmobile—Edward J. Orr, Muncie; McClure's Garage, Winimac.

Durant—Bates Motor Company, 219 South Main St., Kokomo.

IOWA

Graham-Paige—John A. Thielen, Defiance.

Marmon-Roosevelt—Hoenig Motor Company, Fort Madison; F. C. Straeter, Lake Mills.

Durant—Winnebago Auto Company, Lake Mills.

KANSAS

Marmon-Roosevelt—Black's Garage, Pratt; Scott Morgan Motor Company, Hugoton; Hawley Marmon Company, 1707 Central Ave., Kansas City.

MICHIGAN

Hupp — Erbaugh & Ridgway, Flint; Central Auto Company, Grand Haven; Hinckley Auto Sales, Watervliet; Military Sales and Service, Port Huron; N. J. Dickinson, Romeo; Sam Wieland Motor Sales, Bay City.

Durant—Danilson Motor Sales, Howard City; Hartman Bros., 119 Park S., Saginaw; Arthur M. Cook, Lafayette Street S., Greenville; George M. Crause, 124 Main St., Springport; Ernest G. Neuman, corner Lake and North 2d, Alpena.

MINNESOTA

Hupmobile—August Otto, Sauk Center; Chris Johnson, Worthington; Olson Brothers Garage, Cloquet.

Durant—Arnold N. Jenson, Roseau.

MISSOURI

Graham-Paige — Pappas Motor Company, Crystal City; F. X. Roth, Sainte Genevieve; Lau Motor Sales Company, St. Louis.

Hupmobile — Seifert Motor Car Company, E. St. Louis.

Marmon-Roosevelt—F. M. Brown Motor Company, Statler.

Durant—J. T. Moorhouse, Ava; Saloga Motor Company, Purdy.

SPARKS from DETROIT

Super-Highway

* * *

16-Cylinder Cadillac

* * *

Smaller Crop, Higher Prices

Fred Kingsbury—Detroit Editor

IT begins to look as though there would be another super-highway between Detroit and Pontiac, Mich. Announcement has been made by Sir Henry W. Thornton, who directs the destinies of the Grand Trunk Railroad, that his company plans to build an overhead motor speedway over the tracks of the Grand Trunk, between the two cities, which would accommodate four lines of automobiles and would cost $100,000,000.

The plan is to charge tolls over this super-highway and it is reported that work will start at once on the project. However, some adverse comment has been heard.

Governor Fred W. Green is going deeply into the matter and if everyone agrees the super-highway undoubtedly will be built.

Traffic between Detroit and Pontiac is growing rapidly all the time, and although many improvements have been made in the highways between these two cities during the last few years, it is only a matter of time before further enlargements must be made.

Students of the situation say that overhead highways are the only ones that will solve the traffic problem and that we must build them sooner or later.

* * *

Lawrence P. Fisher, Cadillac president, announced the other day that his company in the near future would offer a sixteen-cylinder V-type automobile. While this is no surprise, it will be welcomed by Americans all over the country.

Many people of wealth have been buying high priced foreign cars which are luxurious and Cadillac has taken the stand it can build just as good automobiles, if not better, than any foreign manufacturer.

These cars, it is reported, have been in the making for several years, and are fully developed.

* * *

THE Canadian government bureau of statistics has made a preliminary estimate of the principal grain crops of Canada for 1929, and says that present indications point to the harvesting of a wheat crop of 293,792,000 bushels, compared with 566,726,000 bushels in 1928, the record crop to date.

However, there is a silver lining to the smaller figures, due to the fact that the bureau says the smaller crops this year will be largely counterbalanced by the prevailing higher prices.

* * *

C. C. McGILL, secretary of the public affairs committee of the Detroit Board of Commerce, in a recently published article, said that the delivery of passenger cars in Wayne county, of which Detroit is the county seat, developed a total of 104,560 from the beginning of the year until the end of August. This is an increase of 63 per cent., and may be taken as a distinct reflection of the degree of prosperity at hand. Total production of motor cars for the entire nation during the first eight months was 4,224,600, an increase of 38 per cent. over last year's same period, he says.

These figures show that the automobile business made huge gains during the first eight months of the year.

It might be added that employment in the large industrial plants in Detroit area, during the period between January 1 and August 31, gained 15 per cent. over the same period a year ago.

* * *

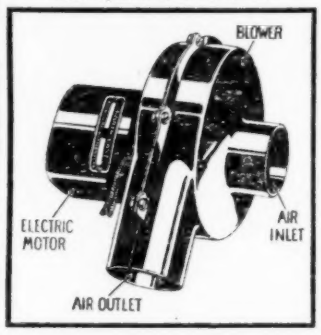
MANY of the tire manufacturing companies have been expanding during the last year. One of the most notable is the Goodyear Tire and Rubber Company of Akron, O., which is making lighter-than-air craft and which has invested millions in this field.

Many of the other companies make rubber heels and many mechanical rubber goods products, in which they have been very successful.

The United States Rubber Company recently announced that it had organized a fiber products department, with R. P. Rose as general manager.

It is reported that for several years the company has been carrying on extensive experiments on products in which latex, rubber in liquid form, is used in conjunction with unwoven fiber, and has reached a point where commercial operations are justifiable.

This is No. 1 of a series of advertisements explaining the engineering features of the world's finest motor car heaters.



Instant Heat
Constant Heat
. . at all speeds!

The recirculating of hot air throughout the car by the two-speed electric blower insures a warm interior on short trips or long trips on the coldest days.

Metalcraft Heaters are now available for the following cars through their authorized dealers:

AUBURN	GRAHAM-PAIGE
BUICK	LA SALLE
CADILLAC	MARMON
CHRYSLER	OLDSMOBILE
DE SOTO	PACKARD
DODGE	PLYMOUTH
FRANKLIN	REO

METALCRAFT HEATERS
WORLD'S FINEST MOTOR CAR

Metalcraft Heater Corporation
Grand Rapids, Michigan
Subsidiary of Grand Rapids Metalcraft Corporation

Financial News of the Automotive Industry

Range of Automotive Stocks

WEDNESDAY, SEPTEMBER 18

NEW YORK STOCK EXCHANGE

Previous 1929 High	Previous 1929 Low	Div.		Sales	High	Low	Close	Net Change
104⅞	25	....	Advance Rumely ...	1,200	27	24	25	— 2½
119	39¼	....	do pf.	500	39¼	38⅜	38⅜	— ⅜
217	95⅛	3	Air Reduction	8,100	209⅞	198	205⅞	+ 4⅝
11¼	4	....	Ajax Rubber	600	4¼	4	4⅛	....
330	166	7	Allis Chalmers	1,300	300	295	300	....
76½	40½	....	Am. Bosch Magneto	1,200	69⅞	69	69⅝	+ ⅝
86	70¼	7	Amer. Chain pf.	1,100	88½	85⅞	88½	+ 3½
8⅞	4¼	....	Am.-La France		No sales today			
500	221	4	Auburn	3,100	514	475	514	+39
104⅜	78	2	Bendix Aviation ...	10,700	86½	84½	85	— ⅞
136⅜	110¼	3	Bohn Aluminum ..	1,000	124⅜	121	122	+ 1⅜
143⅜	76	4	Borg-Warner	600	77	76⅜	76¾	— ¼
63⅛	30½	....	Briggs Mfg. Co. ...	4,900	33	32½	32⅝	— ⅛
43½	35⅛	2	Briggs & Stratton ..	300	36½	36	36½	+ ½
73⅞	38⅛	3	Brockway Motor ...	400	38½	38½	38½	....
54⅜	52	1.60	Bullard	300	43	43	43	....
47	28¼	....	Chicago Pneu. Tool.	800	43	42	43	....
36	26	3	Chicago Yellow Cab		No sales today			
135	66	3	Chrysler Corp.	33,900	70¼	68¼	69	— 1⅛
62⅝	43	2	Commercial Credit..	32,800	52⅝	51½	52	+ ½
105¼	92⅛	6.50	do pf.		No sales today			
212½	131½	4	Comm'l Invest. Trust	6,300	197	193⅝	195⅞	+ ¾
99	91	6.50	do pf.		No sales today			
28⅜	13	.80	Continental Motors.	2,200	14½	14	14	— ⅛
118¾	58⅛	3.50	Cutler-Hammer	1,300	119⅞	118	118⅞	+ ⅝
231	155⅞	4	Du Pont	12,300	213	210	212	— ⅛
76¾	56	3	Eaton Axle & Spring	2,200	61⅞	60¼	60⅝	— ⅞
174	126¾	6	Electric Auto-Lite .	16,200	158½	152½	156	+ 3⅜
92⅞	77	5	Electric Stor. Battery	100	87	87	87	....
73¾	42	2.50	Evans Auto Load ..	300	45	44	44	— 1
22½	5	....	Emerson Brant		No sales today			
22⅜	13⅛	.80	Federal Motors	1,100	13½	13⅜	13½	— ⅛
20⅛	6¼	....	Fisk Rubber	2,300	8⅜	8	8	....
71½	35⅝	....	do 1st pf.	40	42½	42¼	42¼	— ½
33⅞	14	....	Gabriel Snubber ...	200	16	16	16	+ ⅛
403	219	4	General Electric ...	23,000	376½	370	372	— 3⅛
25	10	....	Gardner Motor	600	10⅛	10	10	....
91⅜	66¼	3	General Motors	104,700	76¼	73⅝	75	— ⅛
126½	122½	7	do 7s pf.	200	123½	123½	123½	— ½
64⅛	36⅞	2	Glidden Co.	3,900	60⅜	59	59	....
106½	101⅛	7	do pf.	50	105	105	105	+ 1⅜
105¾	70⅜	4	Goodrich	5,400	72½	71⅜	72½	+ ¼
145	111	7	do pf.		No sales today			
164½	103	5	Goodyear T. & R. ..	4,900	111⅝	109⅛	109¾	+ ¼
104¾	100	7	do pf.	300	101	100⅜	101	+ ⅛
54	22	....	Graham-Paige Motor	1,000	22⅝	22⅛	22½	— ⅜
68⅜	27	8	Hayes Body	300	27	27	27	....
52¾	37½	1.50	Houdaille-Hershey .	5,500	50	48⅜	49½	— ⅝
93½	75⅛	5	Hudson Motor Car..	15,900	86⅜	84⅞	85	— ½
82	38½	2	Hupp Motor Car ...	4,400	44	43	43⅝	+ ⅛
32½	9⅞	....	Indian Motocycle ..	200	11	10	10¼	+ ¼
14¼	8⅛	....	Intercon. Rubber ..	800	9¼	9⅛	9¼	— 1⅛
142	92	2.50	Interna. Harvester .	4,700	131½	130	130½	— 1
145	137	7	do pf.	100	139⅞	138⅞	139⅞	+ 1⅛
242¾	152½	3	Johns-Manville	8,800	217½	214¼	217½	+ 1½
16½	5⅝	....	Jordan Motor Car...	200	5¾	5⅜	5⅜	....
24	9⅞	....	Kelly-Springfield ...	1,700	10	9⅞	10	....
100	85	....	do 6s pf.		No sales today			
94¾	50½	....	do 8s pf.		No sales today			
59¾	40¼	2	Kelsey-Hayes Wheel	2,900	44¾	44⅛	44¼	+ ¾
25	10	....	Lee Rubber & Tire..		No sales today			
61	48¾	2.60	Link Belt	100	50	50	50	+ ⅜
114⅜	91	6	Mack Trucks	2,500	103	102	102	— 1
89¾	69¼	2	Marlin Rockwell ...	1,300	83¾	81⅝	82½	— ½
104	66¾	4	Marmon	1,100	75⅝	75	75	— ½
18	7⅛	....	Martin Parry	100	7⅛	7⅛	7⅛	....
34⅞	20	....	Mengel		No sales today			
28⅞	11½	....	Miller Rubber	500	11½	11½	11½	— ½
8	2½	....	Moon Motors	700	3⅜	3⅛	3⅛	— ⅛
31⅜	21	....	Moto Meter G & E..	9,200	21⅜	18⅝	19¼	— 2¼
206	96½	2	Motor Products	100	113	113	113	— 2
55⅛	38⅜	2	Motor Wheel Corp. .	700	43⅜	42⅛	42⅛	— 1⅜
81⅞	35	....	Mullins Mfg.	400	35	35	35	....
100⅞	60	3	Murray Corp	1,300	61⅜	61	61	....
118⅞	81⅛	6	Nash Motors	1,100	84⅞	84⅛	84⅞	+ ⅛
6¼	1⅜	....	Norwalk T. & R. ..		No sales today			
49	19	....	do pf.		No sales today			
10⅞	6¼	....	Omnibus Corp.	200	7	7	7	....
52¼	37	2.50	Otis Steel	3,100	49⅝	48⅜	49⅝	+ 1⅛
161½	116½	3	Packard Motor Car.	32,700	152	149	149	— 1½
22½	9⅜	....	Peerless Motor Car.	1,000	10¼	10	10⅛	— ⅛
37⅞	27½	....	Pierce-Arrow	400	33	33	33	— 1
87½	72½	6	do pf.		No sales today			
37⅞	20	.80	Reo Motors	3,700	21¼	20½	20⅝	— ⅛
12¼	6	....	Reynolds Spring ...	14,900	12¼	10⅞	11½	+ ¼
66⅜	45	....	Spicer Mfg. Co.	1,300	59¼	57⅛	57⅛	— 2⅜
55⅞	45	3	do pf.	400	50	50	50	....
77	64¾	3.50	Stewart-Warner Spd.	1,900	66¾	66	66	....
98	72⅛	5	Studebaker Co.	2,200	73⅜	72½	73⅜	— ⅛
126	123	7	do pf.		No sales today			
33⅞	22⅝	.60	Timken Detroit Axle	4,000	31¾	30¾	31½	+ ⅜
117⅞	73½	3	Timken Roller Bear.	4,700	115⅜	114⅜	115	+ ¼
63	38¾	2	Trico	400	52½	52	52	— ¼
65	42	....	U. S. Rubber	10,100	57¼	55⅝	55⅝	— ½
92½	69½	....	do 1st pf.	500	78½	76½	77	— 1
42⅞	28⅛	2	Warner Quinlan	600	29⅜	29½	29½	— ⅛
67¾	43¼	2	Westinghouse A. B.	9,900	63¾	62⅛	62⅝	+ ½
53½	38	1	White Motors	2,100	46⅞	45⅝	46¼	+ ⅜
61¼	37	2.50	Wilcox Rich A	900	49⅜	47½	49¾	+ 2¾
62	34	2	do B	9,400	46⅞	45½	46⅜	+ ⅞
35	20	1.20	Willys-Overland	6,200	22	21¼	22	+ ½
103	92	7	do pf.		No sales today			
88	61¾	4	Yale & Towne	200	85½	84	85½	+ ⅝
51¼	33½	....	Yellow Tr. & C. B..	3,700	34½	34	34	— 1⅛
90½	80	....	do pf.		No sales today			

NEW YORK CURB EXCHANGE

Sales		High	Low	Close	Net Chge
300	Budd Ed	24	23½	24	+ ⅜
	Caterpillar T....	No sales today			
	Checker Cab...	No sales today			
32600	Cities Service..	53¾	53½	53¾	...
500	do pf	94⅝	94¼	94⅝	— ¼
	Con Di Fibre...	No sales today			
1500	Cord Carp	35½	34	35½	+ 1⅛
	Doehler D C....	No sales today			
500	Durant Motor..	9⅜	9⅛	9⅜	+ ⅛
100	Fageol Motor...	5¼	5¼	5¼	+ ⅛
500	Fedders	28⅛	28⅛	28⅛	—1⅜
	Federal Mogul..	No sales today			
4100	Fed Screw Wks	72½	71¼	72	+1
4300	Fiat	25	24¾	24¾	— ¼
275	Firestone	230	226¼	227	—3
	do pf	No sales today			
800	Ford Canada...	44	42⅞	43⅞	+ ⅛
6100	Ford Ltd	19	18⅝	19	...
	Franklin Mfg..	No sales today			
	Gen T & Rub..	No sales today			
200	Gr'nf'ld T & D	21½	21⅜	21½	+ ⅜
	Hall Lamp	No sales today			
	Henney	No sales today			
	Hood Rubber...	No sales today			
	India Tire	No sales today			
	Isotta Fras	No sales today			
	Jaeger	No sales today			
100	Lakey	20	20	20	— ½
	McQuay Norris..	No sales today			
100	Midland Steel..	112	112	112	+ 9⅜
100	Nat Rub Mach.	30½	30½	30½	...
600	Paramount Cab	22⅜	22	22⅜	— ⅛
	Perfect Circle..	No sales today			
	Pines Winter...	No sales today			
100	Pitt Pl Glass.	68⅞	68⅞	68⅞	+ 1⅜
	Raybestos	No sales today			
	Rolls Royce Am	No sales today			
600	Ross Gear	51⅜	50	50	+ 1⅜
	Safe T Stat....	No sales today			
300	Seiberling	27¼	27¼	27¼	+ ¼
	Sparks With....	No sales today			
	Stutz Motor....	No sales today			
1100	Thermoid Co...	33⅛	32⅜	32⅝	— ½
200	Thompson Prod.	53	53	53	+ 4⅛
	Triplex	No sales today			
100	Tung Sol.....	42⅛	42⅛	42⅛	— ⅞
	U S Asbestos...	No sales today			
200	Watson, J W...	3½	3½	3½	...
300	Wayne Pump...	23⅜	23⅜	23⅜	— ⅛
100	West Auto	68	68	68	—2
	Yellow Taxi N Y	No sales today			

NEW YORK OVER THE COUNTER

Div.		Bid	Asked
6	Am Hard Rubber.....	70	75
8	Dixon (J) Crucible.....	172	176
3.50	Doehler D C.....	40	45
7	do pf	110	120
....	Eisemann Magneto	30	35
7	do pf	95	100
....	Rolls Royce Am.....	17	21
....	do pf	60	65
1.20	Smith (A O).....	235	250
....	Splitdorf Beth El.....	6	8

CHICAGO STOCK EXCHANGE

Sales		High	Low	Last
50	Ainsworth Mfg Co..	47	47	47
1150	Allied Motor Ind...	47½	46½	47¼
1650	Allied Products	67½	66½	67
1500	Auburn Auto	505	475	505
4200	Bendix Aviation	86½	85	85½
3250	Borg-Warner	77¾	76⅝	77
50	Chain Belt	52	52	52
50	Chicago Yellow Cab	29½	29½	29½
10100	Cord Corp	35½	33¼	35½
600	Houdaille Hershey A	50	49	49¼
900	do B	49¾	49	49
50	La Salle Exten	3⅛	3⅛	3⅛
200	McQuay Norris	70	69½	69½
1750	Modine	71½	69	69½
100	Mohawk Rubber....	27½	27½	27½
400	Noblitt Spark.....	63	61½	62
400	Pines W F.....	80	79	79
1550	Ross Gear	53	50	51½
50	Van Sicklen	26	26	26
50	Warchell	26	26	26
85	Waukesha Motor ...	180	180	180
200	Wayne Pump pf....	37	37	37

CLEVELAND STOCK EXCHANGE

Sales		High	Low	Last
89	Central Alloy pf....	110½	110	110
195	Falls Rubber	4	4	4
675	Faultless Rubber....	42	40	42
10	Firestone 7s pf.....	107	107	107
40	Geometric Stamping	33¾	33¾	33¾
103	Jaeger Machine	32	32	32
5	Ford Motor pf.....	35	35	35
19	Miller Rubber pf....	41	41	41
5	Mohawk Rubber	28	28	28
110	Packard Electric	33	33	33

DETROIT STOCK EXCHANGE

Sales		High	Low	Last
225	Baldwin Rubber	19	19	19
100	Federal Mogul	21	21	21
1906	Ford Motor Canada.	44	43	43¾
485	G R Metalcraft....	12¼	12⅛	12¼
822	Hall Lamp	23¼	22½	22½
785	Hutto Eng	22¼	20½	20½
835	Jackson Motor	20	20	20
1320	Packard new	30⅜	30	30¼
100	P B Stearns	37	37	37
2075	Wilcox Rich B.....	47¼	45½	46¾

Rubber Prices

RUBBER EXCHANGE OF NEW YORK

	High	Low	Close	Prev. close
September	....	....	†19.80	20.10
October	20.50	20.20	20.10a20.20	20.40
November	....	....	*20.50	20.80
December	21.10	21.00	†21.00	21.30
January	21.20	21.10†	21.10a21.20	21.40
February	....	....	*21.30	21.70
March	21.60	21.50	†21.60	21.90
April	....	....	*21.70	22.00
May	22.00	21.90	21.80a22.00	22.20
June	....	....	*22.10	22.40
July	....	....	*22.30	22.60
August	....	....	*22.50	22.80
Spot	....	....	*19.90	20.10
Sales			830	912½

Transferable notices so far, 536.
Market closed steady.

*Nominal. †Trading. ‡Bid.

OUTSIDE CLOSING PRICES

(Per pound, delivered New York)

Plantation—	Bid	Asked
Ribbed smoked sheets, spot....	20¼	20½
September	20¼	20½
October	20½	20¾
October-December	20¾	21
January-March	21¼	21½
April-June	21¾	22
*Spot—		
First latex	21¼	21½
Thin pale latex.....	21½	21¾
Clean thin brown crepe.....	17¼	17½
†Specky crepe	17	17¼
Rolled brown crepe.....	12½	12¾
No. 2 amber.....	17½	17¾
No. 3 amber.....	17¼	17½
No. 4 amber.....	17	17¼
*Paras—		
Up-river, fine, spot.....	21	...
do coarse	11½	*...
Accra, fine, spot.....	21	21½
Caucho, ball—Upper	11½	*...
Centrals—		
*Esmeraldas	11½	12
*Central scrap	11½	12
Guayule, washed and dried....	....	19
†Balata—		
*Block Ciudad	54	..
*Surinam sheet	56	..
*Manaos block	55	..
Peruvain block	21	22

SCRAP RUBBER

(Dealers' buying prices, f. o. b., New York)

Boots and shoes, black, ton.	$18.00	a20.00
Arctics, cwt.	.50	a .60
Inner tubes, mixed, cwt....	4.00	a 4.12½
Tires, standard, mixed, ton	18.00	a19.00
Inner tubes, red, cwt.....	4.37½	a 4.50
Inner tubes, No. 1, cwt.....	7.12½	a 7.37½
Inner tubes, No. 2, cwt.....	3.75	a 3.87½
Mixed hose, soft, cwt	.50	a .55
Hose, air brake, ton.....	18.00	a20.00

*Nominal. †Sold on sample only.

BUDD WHEEL OFFERS NEW STOCK AT $50 A SHARE

Philadelphia, Sept. 19.—Budd Wheel Company common stockholders of record September 28 are offered rights to subscribe to 22,504 shares of additional common stock at $50 a share in ratio of one new share to every ten then held. Payment must be made by October 30.

Directors have decided to split up the common stock on a four-for-one basis. Three additional shares of common stock will be issued to the holder of each share of common stock of record November 8. New stock to be issued under the offering of rights will, therefore, participate in the split-up.

It is expected that new stock after the split-up will be placed on $1 annual basis.

On basis of Wednesday's closing price of 83 for Budd Wheel common, rights are worth $3.

Vancouver, Wash., Sept. 19.—The Gault Motor Company has been organized to distribute De Soto automobiles in Clark county. Dewey Gault, who heads the firm, formerly operated a garage and automobile dealership in Coeur d'Alene, Idaho.

The A. D. N. Analyst Looks Them Over

AMERICAN AUSTIN CAR COMPANY

ONE of the most interesting experiments in the recent history of the automotive industry in this country is being undertaken by the American Austin Car Company, a subsidiary of the Austin Motor Company, Ltd., of England.

The American Austin Company was incorporated under the laws of Delaware in February of this year and expects to be in production early next year on an Austin car built especially for distribution in the United States. The American Austin will be a duplication of the "Austin Seven" of England, except that it will have a left-hand steering wheel and other slight changes to conform with American practice.

Announcements regarding this car have stated that it will sell at a price under the Ford car, with the sedan model retailing at around $450, f. o. b.

Inasmuch as this Austin car will be the first small car of its kind to be put on the market here and will be the first American car selling lower than the Ford since the days of the cycle and "baby" cars of fifteen years ago, the progress of the experiment will be watched with a great deal of interest. The car will have a wheel base of only 75 inches, and its arrival on the market will give the American automotive industry an opportunity to find out whether it has been overlooking a market for a product selling in the price field immediately below that of the Ford. The outstanding success of this venture would give the American industry a real surprise.

The first step toward manufacture of the car was the purchase by the company of a plant in Butler, Pa., from the Standard Steel Car Company. The next step was the issuance of 300,000 shares of no par common stock, of which 250,000 shares were offered to the public at $12.50, and listed on the New York Produce Exchange. Another 225,000 shares are being offered in England, where the stock is listed on the London Stock Exchange. The company will make application for listing on the Pittsburgh Stock Exchange. The capitalization is 1,000,000 shares, of which 250,000 shares are being reserved on option. The American company has back of it one of the strongest firms in the automotive industry in England, and every effort will be made to achieve success in the United States.

A. J. Brandt is president of the American Austin Car Company, and the directors, in addition to Mr. Brandt, are F. Bulkley, Sir Herbert Austin, H. S. Edwards, E. Ritts, J. P. Rohrbach, S. H. Vallance, A. S. White and T. P. White. Offices are in the General Motors Building, New York city.

NATIONAL MOTORS MANUFACTURING COMPANY

THE National Motors Manufacturing Company of Irvington, N. J., manufacturer of Day-Elder trucks and buses, showed an increase in gross income of over 37 per cent. during the first half of 1929 as compared with the same period of 1928.

An increase of 34.4 per cent. was made in 1928 over 1927 for the first half period. The gross for the entire year of 1929 will show a 50 per cent. increase over 1928, if the present rate of sales expansion is maintained for the rest of the year.

Sales of trucks and buses during the first six months of this year gained 40 per cent., when compared with the first half of 1928. The profit and loss account shows an increase of over 65 per cent. At the present rate of profit increase, there should be a gain of over 70 per cent. for the entire year of 1929 as compared with 1928.

Ever since the company was organized, thirteen years ago, its sales policy has been along conservative lines, and its production centered on building vehicles made up of the best units that money could buy. Recent sales volume to companies of national reputation indicate that this policy is appreciated by the users.

The company is making rapid strides in carrying out its new program of expansion. It has established an export office at 15 Park Row, New York, and has added additional personnel to its wholesale and advertising staffs.

The National Motors Manufacturing Company is a closed corporation with no stock on the market.

Its officers consist of the following: F. T. Macrae, Jr., president; A. L. Rice, vice-president in charge of local sales; C. A. Metzger, secretary, in charge of purchases, and H. G. Redden, treasurer. Associated with Messrs. Macrae, Rice and Redden on the directorate are J. William Hatt, Archibald Slingerland, H. Braverman and H. R. Smith.

WALKER MANUFACTURING COMPANY

THE position of the Walker Manufacturing Company in the automotive industry was considerably strengthened recently by the acquisition of the Ajax Auto Parts Company, with a plant in Racine, Wis., the home of the Walker company.

The concern manufactures automobile jacks, being one of the largest producers of this product in the country. It has about 500 employees.

The company was incorporated in 1915 to acquire the business of the J. C. Moore Manufacturing Company. Its present capitalization, giving effect to new financing in July, 1929, consists of $1,000,000 in $3 convertible $50 par preferred, all of which is outstanding, and 100,000 shares of no par common, of which 50,000 shares are out. The remaining common shares are held for the conversion of the preferred, which may be exchanged for the common on a share-for-share basis at any time. The preferred is redeemable at $52.50 a share, and in the event of involuntary liquidation is entitled to $52.50 a share, $50 being allowed in the event of voluntary liquidation. An offering of 20,000 shares of the preferred was made in July at $49 a share. Initial quarterly dividends of 75 cents on the preferred and 37½ cents on the common were paid on August 1, 1929. The common has no funded debt.

Net sales of the Walker Company are showing a large expansion this year over 1928, and a resulting big increase in net profits is anticipated. Net sales last year were $3,001,504, as compared with $2,479,318 in 1927, from which a net profit after taxes of $270,921 was reported in 1928, as against $184,124 the year before.

Officers of the company are W. T. Walker, president and treasurer; W. H. Walker, vice-president; W. H. Lundberg, secretary. These officers also serve as directors. The company's fiscal year conforms to the calendar, and the annual meeting is held on the first Monday in February.

1929

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

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The Touring Industry

EVERY year Americans spend hundreds of millions of dollars in foreign travel. Such countries as France and Switzerland have long considered the tourist industry as an important item in their national finances. These countries cater to tourists, try to smooth their paths and make extended stays with the inevitable spending a natural and pleasant characteristic of a visit.

Here in this country we have evolved, almost without realizing it, a tourist industry that is many times bigger than that of any foreign country. Of the 25,000,000 motor vehicles in operation here, a very large part become "touring cars" in the literal sense during some period of the summer. Anyone who takes to the road in almost any section of the country cannot but be impressed by the migratory character of the traffic he meets. He sees plates from almost every state in the course of a day's run, no matter where he may be driving. Any New England crossroads in summer finds Americans from the ends of the country visiting the land from which most of them originally derived. But even in the South, which might not be held as the ideal touring ground for warm weather, the far flung traffic shows the same diversity of origin.

The obvious result of this national summer wanderlust is the evolution of local industries to cater to the travelers' needs. The hot dog and soda water stands are merely one phase of this general capitalization of the new industry. Another phase of this new tourist industry is to be found in the signs that dot every main highway of the country: "Tourist accommodations, free garage." Private homes are thrown open during the touring season to the service of transient visitors, at rates below the ordinary hotel levels. Service stations are beginning to advertise special service for tourists.

Perhaps we do not even yet realize the importance of this tourist industry of ours. There is a profound and pleasant change in the attitude of officialdom toward the stranger in a motor car. Where speed traps used to be set and policemen took delight in "bayling out" those who had infringed local laws, through ignorance, the traffic czars today are inclined to overlook breaches of regulations by strangers. The police generally are ready to assist motorists from other sections of the country.

Automobile dealers, service station operators and all others will be well advised to foster and develop in every way possible the desire of Americans generally to see other parts of their country by means of their cars. The revenue, direct and indirect, from touring will be a most important item in automotive balance sheets in the future.

The Perfect Alibi

AT a night stop in the sunny southland, a wealthy motor tourist recently lost a valuable dog. He refused to leave without the animal and inserted an advertisement in a local paper offering a reward of $100 for the return of the pup. Then he settled down at the hotel to wait for results.

Early next morning the visitor went to the office of the newspaper to see whether there were any answers. The newspaper office was deserted. Growling, the visitor repaired to the garage where he stored his large and opulent looking car. The garage also was deserted, but finally he attracted the attention of a small and tattered colored boy and asked him why the place was deserted.

"Nice kind of a town," he grumbled, "no one at the newspaper office, no one at the garage. How do they ever expect to get my dog back or anything else?"

"Why, colonel," came back the youth, "they's all out lookin' fo' yo' dawg and I'se goin' mysef, jes' as soon as yo' all leave."

P. S.—He got his dog.

LOUISVILLE SALES OFF IN AUGUST

Total 14.2% Above 8 Months Period of Last Year

Louisville, Ky., Sept. 19.—The month of August with the Louisville automobile dealers was below normal, with a decrease of 13 per cent., or 126 cars on the month, total sales of new cars having been 838 cars, as compared with 964 cars in August of last year. Sales for the eight months, however, are 14.2 per cent. above last year, or 6,788 in 1928 to 7,754 in 1929.

It is interesting to note that Buick had a gain of eight cars for August, as compared with August of last year, showing that the new model, which recently came out is taking. The Marquette also had a total of eight sales in August, as against eleven cars sold since the car was placed on the local market. Chevrolet sales were an even hundred cars below August of last year; while Ford showed a gain of 105 cars.

There were very few cars which showed gains. The new Roosevelt with ten sales showed well. Essex was down to forty-four cars, as against sixty-nine in August of last year, but at that time the taxicab war was just starting, and there was an active demand for Essex cars.

Figures for the month on all cars sold in this market were as follows:

	Aug. 1928	Aug. 1929
Auburn	5	2
Buick	40	48
Cadillac	2	2
Chandler	5	..
Chevrolet	243	143
Chrysler	26	18
De Soto	2	15
Dodge	33	19
Durant	17	13
Erskine	11	
Essex	69	44
Ford	225	330
Franklin	3	3
Graham Paige	43	11
Hudson	3	6
Hupmobile	11	4
Jordan	..	4
La Salle	3	3
Lincoln	3	2
Marmon	3	2
Marquette	..	8
Moon	5	..
Nash	25	15
Oakland	12	1
Oldsmobile	22	13
Packard	8	13
Pierce Arrow	3	5
Plymouth	14	11
Pontiac	48	29
Reo	12	9
Rolls Royce	1	..
Roosevelt	..	10
Studebaker	18	28
Stutz	..	2
Viking	..	2
Whippet	31	15
Willys-Knight	17	8
Miscellaneous	1	..
	964	838

AKRON HUDSON DEALERS TO RECONDITION CARS ON TIME PAYMENTS

Akron, O., Sept. 19.—A complete reconditioning plant for rebuilding old cars and a system of installment payments of repair bills over a period of several months is a new feature of motor car maintenance instituted by J. Grant Hyde, Inc., local Hudson-Essex dealer.

W. H. Paxton, service manager, who just announced the plan, has arranged charts and estimates to cover most every operation to rebuild a car—painting, body and upholstery repairs, complete overhauling, tires, battery, electrical work, brake service, wash and polish, motor wash is included in service offered.

"A good many automobiles deteriorate early due to neglect, carelessness and abuse. Revamping your car by instilling new life and beauty at the proper time will save you more dollars than any budget system you may devise," said Paxton.

"The yearly depreciation on a new car is quite a shock to the average purse and we believe reconditioning motor cars complete on time basis will go a long way to bring about a more prosperous condition to many car owners and make the highways more safe for travel."

Newark, N. J., Sept. 19.—Fred Reimann, formerly with the Newark store of the W. E. Pruden Company, automotive jobber, is now manager of the concern's Bronx branch in New York.

Hollister Explains Workings Of Financial Responsibility

Editor Automotive Daily News:—

Here is the latest information regarding the New York automobile financial responsibility law:

The insurance companies, with the approval of the insurance department, have effected a penalty charge of 10 per cent. which will have to be paid by individuals on whose behalf certificates are required on account of a conviction of any of the following sections of the Vehicle and Traffic Law:

Section 20, sub-division 4—Operating a motor vehicle without an operator's license.

Section 56 and 57—Driving a motor vehicle at an excessive rate of speed, where an injury to person or to property actually results therefrom.

Section 58—Driving a motor vehicle in a reckless manner, where an injury to person or to property actually results therefrom.

Section 70, sub-division 5—Driving a motor vehicle while intoxicated or failing to stop when involved in an accident.

In other words if an automobile owner has an accident and he is obliged to file a certificate with the commissioner of motor vehicles, attesting as to his financial responsibility, he is obliged to pay an additional premium of 10 per cent.

There are two kinds of policies which an individual can secure, as follows:

1. An Owners' Policy, which will protect the owner while his car is being operated. By paying an additional premium of 25 per cent. he can secure protection while operating any other car, whether he rents it, or if it is loaned to him.

2. An Operators' Policy, which may be secured by any individual who does not own a car. The premium for this is the highest rate in the territory where the individual resides. If an operator meets with an accident and he is obliged to file a certificate as to his financial responsibility, he must also pay an additional premium of 10 per cent.

If an owner loans his car to an individual and both the owner and the operator were held responsible because of any violation of the law as above stated, the owner's policy would fully protect him for this and future accidents. However, the operator, while he would be protected for this accident, he would not have a certificate to file as to his financial responsibility for the future, in order that he shall not lose the right to operate a motor vehicle in the State of New York.

New York. L. T. HOLLISTER.

FORUM

The Automotive Daily News is glad to receive letters from its readers on topics pertaining to the trade and to publish such as seem to have general interest. Obviously the Automotive Daily News must disclaim responsibility for views expressed by its readers.

FRANKLIN COMPLETES NOVEL PIKES PEAK TEST

Syracuse, N. Y., Sept. 19.—An air-cooled Franklin sedan, driven by Cannonball Baker, made six complete round trips without stop from Crystal Creek plateau to the rock-bound summit of Pikes Peak, a total distance of 150.28 miles, in four hours and twenty-five minutes, averaging 34.03 miles an hour.

Each trip to the summit of the Peak, a distance of 12.4 miles, required a climb of 4,959 feet, making a total climb of 29,754 feet for the six upward trips. It is the first time that such a test had been attempted on the historic course.

NEWARK DEALERS PROTEST POLICE BAN ON PARKING

Newark, N. J., Sept. 19.—At a mass meeting in the office of the Morgan Motor Company, Ford dealer, yesterday afternoon, nearly 200 Newark merchants passed a resolution demanding that an immediate stop be put to the police practice of towing to garages automobiles found parked in the business section after 4.30 in the afternoon. Only one negative ballot was cast against the resolution.

Merchants, numbering many accessory and tire men, complain that the towing ordinance has driven suburban shoppers from Newark which it would take years to bring back to Newark. A lively debate took place during the discussion of the resolution.

ALLEN TO DISTRIBUTE HUDSON, ESSEX LINES

Tacoma, Wash., Sept. 19.—Announcement that the Allen Motor Company of Tacoma and Seattle, which he heads, has been appointed Hudson-Essex distributor for western and central Washington and that he personally has purchased a half interest in the Portland Motor Car Company, distributor for the same line in Oregon, was made here today by Harold Allen upon his return from the Hudson factory in Detroit.

Allen has been made executive vice-president of the Portland firm. The deal is regarded as one of the largest automotive transactions ever consummated in the Pacific Northwest. Allen said that the two companies will require more than 7,000 Hudson-Essex automobiles during the coming year.

CALENDAR OF COMING EVENTS

SEPTEMBER

15-21—**Springfield, Mass.** Eastern States Exposition.
18-20—**Atlantic City, N. J.** National Petroleum Association meeting.
28-Oct. 4—**Atlantic City, N. J.** American Electric Railway Association Convention.
30-Oct. 4—**Cleveland, O.** National Machine Tool Builders' Association Convention.
30-Oct. 4—**Chicago, Ill.** National Safety Congress.

OCTOBER

2- 4—**Cleveland, O.** Society of Automotive Engineers' Production meeting.
3-13—**Paris, France.** Automobile show.
7- 8—**Houston, Tex.** Texas State Tire Dealers' Association convention.
7- 8—**Erie, Pa.** Pennsylvania Automobile Association ninth annual convention.
7-11—**Washington, D. C.** Permanent International Association of Road Congress, sixth session.
12—**Tulsa, Okla.** Oklahoma Tire Dealers' Association meeting.
12-27—**Dallas, Tex.** Southwestern Automobile Show.
16-18—**Detroit, Mich.** Society of Industrial Engineers Convention.
17-18—**Sioux City, Ia.** Iowa Automotive Dealers' Association, annual convention.
17-26—**London, Eng.** Automobile show.
23-25—**Cleveland, O.** Society of Industrial Engineers, sixteenth annual meeting at Hotel Statler.
23-30—**Prague, Czecho-Slovakia.** Automobile show.
24-26—**Philadelphia, Pa.** American Gear Manufacturers' Convention.
29-Nov. 22—**Tokio, Japan.** World Engineering Congress.
—**Sioux City, Ia.** Automobile Merchants Association Convention.

NOVEMBER

4-9—**Chicago.** Motor & Equipment Association Annual Business Exhibit.
6- 8—**Detroit, Mich.** National Automotive Parts Association Convention.
7-16—**London, Eng.** Truck show.
9-16—**Chicago, Ill.** Automobile Salon at Hotel Drake.
11-14—**Chicago, Ill.** National Tire Dealers Association Convention and Trade Exhibition at Sherman Hotel.
11-16—**Detroit, Mich.** National Standard Parts Association Show and Convention.
12-15—**Toronto, Canada.** Society of Automotive Engineers' Transportation Meeting.
14-24—**Paris, France.** Truck show.

DECEMBER

1- 7—**New York.** Automobile Salon at Hotel Commodore.

JANUARY

4-11—**New York.** National Automobile Show.
6- —**New York.** National Automobile Dealers' Association Convention.
9- —**New York.** Society of Automotive Engineers' Annual Dinner.
11-18—**Atlantic City, N. J.** American Road-builders Association Convention.
11-18—**Newark, N. J.** Automobile Trade Association Annual Show.
13-15—**Boston, Mass.** Annual Automobile Show.
21-24—**Detroit, Mich.** Society of Automotive Engineers' Annual Meeting.
25-Feb. 1—**Chicago, Ill.** National Automobile Show.
25-Feb. 1—**Cleveland, O.** Show at Public Auditorium, auspices of Cleveland Automobile Manufacturers and Dealers' Association.
27-28—**Chicago, Ill.** National Automobile and Public Auditorium, Dealers' Association Convention.
30-31—**Cleveland, O.** Association of Commercial Haulers' convention, Cleve-

FEBRUARY

8-15—**Los Angeles, Cal.** Automobile Salon at Hotel Biltmore.
22-Mar. 1—**San Francisco Cal.** Automobile Salon at Palace Hotel.

Aviation Daily News

9 NEW ENTRIES FOR SAFE PLANE TESTS

Guggenheim Awaits Specifications From 5 Companies

NEW YORK, Sept. 19.—Harry F. Guggenheim, president of the Daniel Guggenheim Fund for the promotion of aeronautics, announces the acceptance of nine new entries in the international safe aircraft competition, making a total entry list of twenty-five.

The new entries, all of whom are American manufacturers, are as follows:—

Gates Aircraft Corporation, New York city, American manufacturers of R. S. V. planes. Submitting the Gates R. S. V. mono-biplane, two place, open cockpit biplane, designed for training and sport purposes. Renard engine (manufactured in Belgium) five-cylinder air-cooled radial.

Taylor Brothers Aircraft Corporation, Bradford, Pa. Submitting a high wing, cabin, two place, side-by-side monoplane with variable incidence. Kinner engine K-5.

Command-Aire, Inc., Little Rock, Ark. Submitting Standard Production Model Type 5-c-3, three place, open cockpit biplane. Curtiss Challenger engine.

Ford-Leigh Safety Wing, Inc., Jackson Heights, L. I. Submitting a two place, open cockpit biplane, with Leigh Safety Wing device. Curtiss OX-5 engine with Kirkham valve gear.

Moth Aircraft Corporation, Lowell, Mass., American manufacturers of the De Haviland Moth. Submitting a two-place, open cockpit biplane and fitted with Handley-Page automatic auxiliary airfoils. D. H. Gipsy engine.

John H. Wiggins Company, Inc., Tulsa, Okla. Submitting a two-four place open cockpit biplane with special flaps and slot design. Wright J-6; five-cylinder radial engine.

V. J. Burnelli, Keyport, N. J. Submitting a two-seater, twin engined, monoplane with variable camber wing; four-wheeled landing gear with special tires and brakes; two American Cirrus Mark III engines with ability to fly on either engine.

Bourdon Aircraft Corporation, Hillsgrove, R. I. Submitting a three-place, open cockpit biplane model B-4. Kinner K-5B engine.

Whittelsey Manufacturing Company, Inc., Bridgeport, Conn. Submitting a modified Whittelsey Avian two-place, open cockpit biplane, fitted with Handley-Page slots. Cirrus Hermes engine.

Five other applications for entrance have been submitted, but as yet the specifications are inadequate. With this exception, the entry list is closed.

GERMAN-AMERICAN AIR TRAFFIC CO. UNDER WAY

Berlin, Sept. 19.—Establishment of a German-American Air Traffic Company for transatlantic service is understood to be under negotiation in Hamburg by Dr. Hugo Eckener, commander of the dirigible Graf Zeppelin.

The company would be established on a basis of equal representation of Germans connected with the Hamburg-American Line and Americans of the Harriman shipping interests.

Eckener said sufficient capital had been assured to build an additional dirigible, construction of which would be started as soon as a large enough hangar had been built at Friedrichshafen.

AIR SHOW AT MEMPHIS GETS OFFICIAL O. K.

Memphis, Tenn., Sept. 19.—The aviation and aircraft show at the Mid-South Fair, September 28-October 5, has received the official sanction of the Aeronautical Chamber of Commerce of America, it was announced today by Arthur Halle, chairman of the aviation committee of the fair.

"The aircraft show is the first held in the South," Mr. Halle said. "It is attracting national attention and will be notable because of its completeness. Everything needed to equip an airplane or an airport will be on display."

New Fokker F-32 Largest Land Plane in World

THE FOKKER AIRCRAFT CORPORATION recently tested out the new F-32 shown above, at its airport in Hasbrouck Heights, N. J. It is the largest land plane in the world, 16 feet 6 inches high and has a span of 99 feet. It carries thirty passengers and a crew of four in day flights, and sleeps sixteen passengers in comfort in night flights.

STINSON DECLINES OFFER FOR MERGER WITH CORD

Detroit, Sept. 19.—Edward A. Stinson, president of the Stinson Aircraft Corporation, says: "Offers of mergers have been received from numerous sources during the past year, and one is now being carefully considered which offers more attractive possibilities than any heretofore. The recent merger proposal from Cord Corporation, offering one share of Cord stock for two shares of Stinson was refused, being considered too low."

NEW AIRPORT OPENED

Winder, Ga., Sept. 19.—The new airport here was formally opened with a dedication in charge of Douglas Davis, winner of the main race in the National Air Show held recently at Cleveland, O. The airport was completed by the promoters of the North Georgia Fair, where air exhibitions for this fall are being planned. First of these fairs will be held the week of October 1 to 5.

Maine Air Transport Concern Formed by 3 Automotive Dealers

LEWISTON, Me., Sept. 19.—A trio of Maine young men, well known as live wires in the automotive industry, have reached out for new worlds to conquer in the field of aviation and selling of planes, airplane transportation and general commercial flying. They are Harry Wishman, Jr., an executive of the Valvoline Oil Company of Maine; T. Y. Springer, vice-president of the Clifton R. Shaw Company, Maine distributor for the Willys-Knight cars, and J. J. Biasi, another Willys-Knight dealer with a salesroom and garage service station in Augusta.

The new company will be known as the Maine Airport Transport Company and it has secured the Maine distribution for the Waco planes. The plans include passenger transport between Maine and other New England points, aerial photography, airplane sales and aviation instruction. At present the flying base is located at Stroudwater, just outside Portland, but the partners are now casting about for a good field in this city.

T. Y. Springer is president. He is known throughout the Pine Tree state as a go-getter in the automotive field. A few years ago he became local manager for the Shaw Company and built up a sales organization and a business that is a leader in the Maine automotive field today. He is a student pilot, like Messrs. Wishman and Biasi, who will soon have their pilot's licenses.

Mr. Biasi is a dealer in Willys-Knight cars at Augusta, with a handsome salesroom and a prosperous garage business. L. E. Shealy, formerly of the United States navy air force and a former air mail flyer, will be chief pilot.

50-PLANE HANGAR FOR MASS. AIRPORT

Truss Suspension Type To Be Used at Agawam

SPRINGFIELD, Mass., Sept. 19.—The Bowles Airport hangar in Agawam is in process of construction and will be ready for use about November 1. It is designed to accommodate fifty planes easily, and is really three hangars in one.

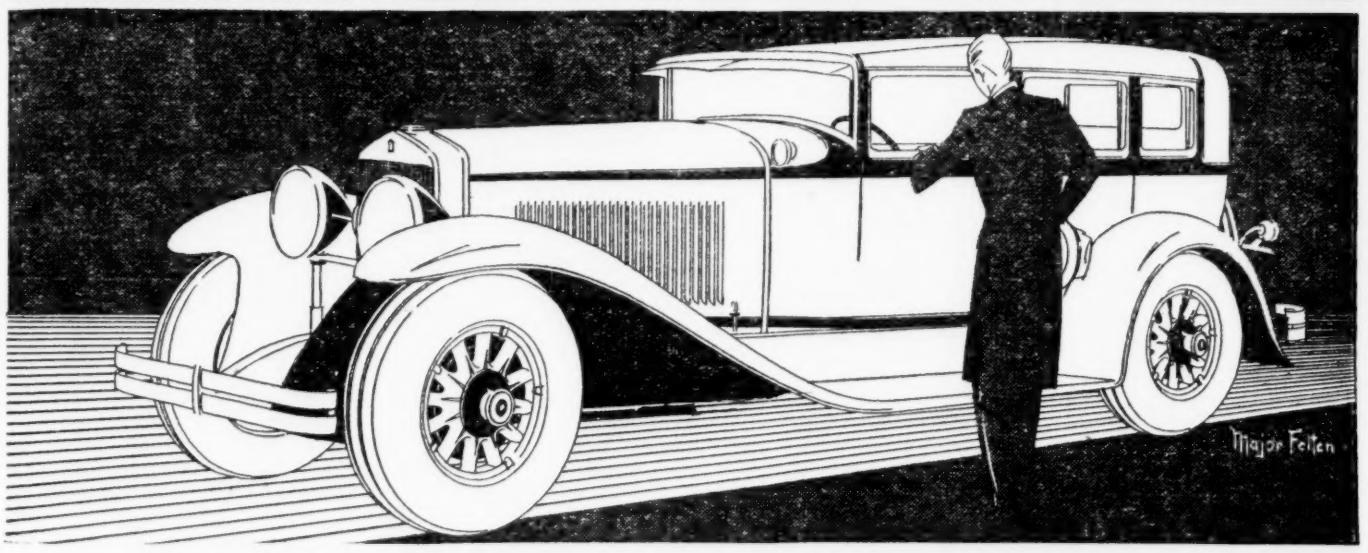
The two outside sections measure 90 by 90 and the center section will be 120 by 90 feet. The doors will roll back onto the fire walls, allowing any of the largest planes to be rolled straight into the hangar. The door is to be fireproof also and will be 22 feet high, allowing ample clearance for any ship.

H. L. Sprague, the architect, stated that the roof is of a design little used heretofore, a truss suspension type which meets the latest requirements of fire underwriters. The hangar will be 120 feet deep over all, as shops will extend the entire length of the hangar on the side nearest the road.

More than 400 tons—about 20 car loads—of steel is being used in the frame of the hangar, and the walls will be of red brick with gray stone trimming.

John J. O'Neil, assistant to Mr. Springer in the Shaw corporation, is field superintendent. The Maine Airport Transport Company's field is the only flying field in Portland.

Windsor



SIX—"69"

A LOWER PRICED COMPANION TO THE FAMOUS WINDSOR WHITE PRINCE

Here's the new international sensation for 1930, the car that re-styles the product of the entire industry, creates new standards of performance and comfort, establishes new and startling values. ¶ It's the big Windsor Six—"69"—looks and behaves like $500.00 more than it costs, a real challenge to all America. See this great line of Sixes and Eights today. Prices scale downward from $2345 to $1045. Come drive this "69" today, the "75", the "85" and the "92"—cars to fit every pocketbook.

WINDSOR CORPORATION • BUILDERS OF SIXES AND EIGHTS • ST. LOUIS

DEALERS: A liberal Windsor franchise is available for certain neighborhoods. Write or wire today for locations and details

Wisconsin Truck Sales Almost Double 1928

AUGUST SETS NEW MONTHLY RECORD

8 Months' Total 11,212 As Against 6,299 in 1928 Period

KENOSHA, Wis., Sept. 18.—The state of Wisconsin for the first eight months of the year has nearly doubled its truck sales as against the same period in 1928, according to the tabulations released by the automobile licensing division of the secretary of state's department.

August, 1929, set a new monthly record for the year with a total of 1,144 truck registrations. The same month a year ago reported only 731 commercial car sales.

The total for the eight months period this year is 11,212, compared will 6,299 for the same period a year ago. In the tabulations every manufacturer who sold three or more trucks in Wisconsin in August, 1929, showed an increase for the first eight months of the year over last year's figures with the exception of Graham, Reo, Mack, White and Federal, and in these five cases the figures were close on the heels of last year's sales.

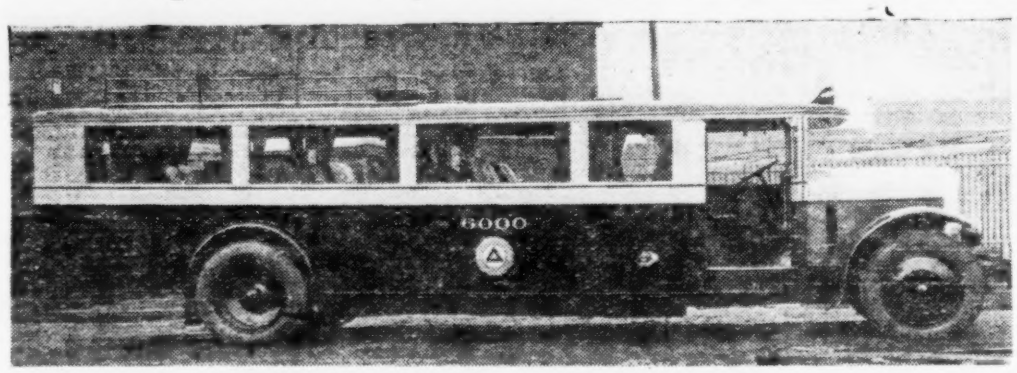
Here are the tabulations by manufacturers for comparison:—

	Aug., 1929	Aug., 1928	Total 1929
Ford	509	119	5,140
Chevrolet	347	314	3,368
International	71	62	748
Graham	53	65	465
Reo	43	37	291
G. M. C.	20	31	244
Whippet	20	9	120
Diamond T.	16	3	164
Sterling	14	6	100
Fargo	10	..	48
Stewart	6	6	57
F. W. D.	4	..	33
Relay	4	1	20
Titan	4	3	23
White	3	8	57
Mack	3	14	37
Federal	3	2	71

The statistics show that the manufacturers reporting the largest increase in sales for the eight months of 1929 against 1928 were Ford, Diamond T., International, Titan and Whippet.

Hackensack, N. J., Sept. 19.—The Public Service Co-ordinated Transport has sta ted operation of its Hackensack-Edgewater bus line and will run buses to the Radburn railroad station.

Adopts New Style for Chartered Service



PUBLIC SERVICE CO-ORDINATED TRANSPORT OF NEW JERSEY, which has been adding several units to its de luxe service this year, has turned out from its bus body shops its latest interpretation of de luxe buses for its chartered service branch, one of which is shown above. On September 1, 1928, Public Service operated 1,778 buses, of which 235 were de luxe type. On September 1 last, the company operated 2,153 buses, of which 368 were de luxe, an increase of 375 buses in the year.

BUS OPERATORS DISCUSS SAFETY

Nebraska Group Plans Strict Adherence To New Rules

LINCOLN, Neb., Sept. 19.—Representatives of a half dozen motor bus companies met with the members of the state railway commission and Buck Taylor, chief of the highway patrol force, to discuss safety regulations. Although the commission has received some complaints with reference to speed, the use of sirens, and road hogging, the operators assured them that every effort is being made to see that their drivers comply with the laws and general safety regulations.

The representative of the Interstate Lines said that his company's buses are equipped with a speed governor which is designed to limit the speed to forty miles an hour. Representatives of the other companies asserted that they have ordered their drivers not to exceed forty miles an hour, regardless of the fact that the state law permits forty-five miles an hour.

"We believe that forty miles an haur is the maximum speed that buses should be driven to insure the safety of our passengers," the Missouri Pacific representative told the commission. The Yelloway representative said that his company discharged eight drivers last spring for violating the speed rules.

There was also a discussion of the sirens used on buses. The operators agreed to instruct all drivers with reference to the use of these horns. The Interstate Transit Company recently adopted a rule prohibiting the sounding of these sirens within 500 feet of the car which the bus is approaching. It was explained that this type of horn is needed in the winter time when most cars are closed and the ordinary horn is not likely to be heard.

The purpose of the conference was to acquaint the operators with the rules which will be strictly enforced by state highway patrolmen in the future.

Dealer Activities

Los Angeles, Sept. 19.—James S. Woolacott, 5825 Sunset Boulevard, has been appointed southern California and Arizona distributor for Ruxton front-drive automobiles.

Trenton, N. J., Sept. 19.—The Cadillac-La Salle Corporation of Trenton, of which Frank D. Olmstead is president and general manager, has opened for business at West Hanover and Barnes Streets. The concern will conduct a 24-hour service. Joseph D. Truxton is vice-president and treasurer.

Youngstown, O., Sept. 19.—Moss Motors, 789 Wick Ave., has been promoted as Durant distributor for the Ohio counties of Mahoning, Trumbull and Columbiana and in Mercer county, Pennsylvania.

Winter Park, Fla., Sept. 19.—Appointment of the firm of Ahlgrim & Lytle as Durant distributer throughout thirteen central Florida counties has just been announced by Durant Motors, Inc. The firm is located at 312 Fairbanks Ave., where 5,000 square feet of working space especially designed for automobile merchandising are provided.

Scotts Bluff, Neb., Sept. 19.—Eleven Nebraska and two Wyoming counties comprise the territory served by the W. H. Dunn Motor Company, new Durant distributor. W. H. Dunn, sole owner of the company, is one of the best known business men in that section, having been engaged in commercial pursuits in Scotst Bluff for the past forty-five years.

Marshfield, Wis., Sept. 19.—Edward Damrow has purchased the interest of Walter Miner in the Miner & Peil Automobile Company. The firm handles Dodge and Durant cars.

Denver, Col., Sept. 19.—Denver's newest automobile sales and service plant—the home of the Larson-Nash Motors Company, 590 Broadway, has just been opened here. Occupying ground space of 125 by 125 feet, the new structure is three full stories high. The front is of brick, tile and stucco. Reinforced concrete comprises the material used in the general plan, with a broad concrete ramp connecting the second and third floors. The salesroom for new cars is 60 by 125 feet, less the space occupied by a row of offices on the east side. The other side of the first floor is for used cars. The parts stock, body repairing and refinishing departments are on the third floor. The general offices are on the second floor.

Denver, Col., Sept. 19.—With the addition of the new Cord car to the Auburn line, O. B. Roney, formerly of Fort Collins, Col., has joined with W. W. Bradshaw in expanding the Denver Auburn dealership. Bradshaw and Roney will enlarge their salesroom and parts department at 1311 Lincoln St. to take care of the enlarged volume of business. Roney, who is general manager of the firm of Bradshaw & Roney, announces that the outlook for business is good in the Denver district.

South Bend, Sept. 19.—The Stehling Motor Company has been appointed Studebaker dealer in Milwaukee, Wis. The new concern will maintain a salesroom and service station at 1145 Upper Third St., and will operate under the Studebaker Sales Company of Milwaukee, Studebaker distributor for the Milwaukee territory.

Portsmouth, O., Sept. 19.—The Scioto County Motor Company, distributor for Studebaker and Erskine cars at Portsmouth, O., has been purchased by E. O. McCall, prominent Portsmouth automobile dealer.

LET CONTRACTS FOR NEW GREENSBORO TAXI HOME

Greensboro, N. C., Sept. 19.—Contract has been let by J. B. Stroud and W. W. Dick to P. J. Herter, contractor, for erection of a brick and steel garage to house the Yellow Cab Company, Greensboro, W. S. Wyrick, president.

The building will be at Washington and Forbis Streets, opposite the Southern station, and will house fifty cars. It is to cost $100,000, will be one story, and 60 by 100 feet.

Personal Briefs

Raleigh, N. C., Sept. 19.—Hardy Murfree Ray has been named sales promotion manager for the Sanders Motor Company, Ford dealer at Raleigh. He has just completed a course at the Ford sales school in Charlotte.

San Diego, Cal., Sept. 19.—William R. Carew, sales manager at San Francisco for Don Lee, Inc., Cadillac-La Salle distributor for California, has been promoted to branch manager of the San Diego unit of Don Lee.

Columbus, O., Sept. 19 (U.T.P.S.).—H. H. Goodrich, who was associated with the used car department of the Chevrolet Company at Detroit, has been named new city sales manager for the Chevrolet in Columbus. He takes the place of T. O. McLaughlin, who was promoted to the Cleveland organization.

Dallas, Tex., Sept. 19.—The appointment of R. W. Watson as manager of the Dallas district of the Plymouth Motor Corporation was announced recently by A. van Der Zee, Plymouth general sales manager. Watson has been with the Plymouth Motor Corporation in various capacities since its organization.

Rochester, N. Y., Sept. 19.—Formal opening of the new Overland-Rochester Corporation, 626 Main St. West, authorized dealers in Willys-Knight and Whippet cars was held Monday. Roy G. Miller, for ten years with Miller Lee Company handling the Overland line, is manager of the newly formed corporation. Albert Rine, another Miller-Lee man, will head the sales department, while Paul West formerly Willys-Knight branch service manage at Buffalo, N. Y., will be in charge of service. Pete Hutchinson, formerly parts manager of the Miller-Lee Company, will hold down a similar berth with the new firm.

In the Bus Field

Lincoln, Neb., Sept. 19.—T. H. Peltz of York, Neb., operator of the Central Service bus line, has been given permission by the state Railway Commission to open service between the Nebraska cities of Columbus and Albion, not now being served. Service will be given through Monroe, Genoa and St. Edward.

Elizabeth, N. J., Sept. 19.—The Pennsylvania General Transit Company, a subsidiary of the Pennsylvania Railroad, has been granted permits to operate ten buses through Elizabeth. The permits limit the company to one terminal in the city.

Jersey City, N. J., Sept. 19.—The Emergency Bus Operators, Inc., a subsidiary of the Montgomery-West Side Bus Line, will operate a line of twenty buses through the lower west side of Jersey City, connecting with all other lines of the company. The line will probably go into operation by the middle of October.

WISCONSIN AXLES

Truck salesmen have no difficulty selling when their product is Wisconsin equipped. Buyers, today, recognize the investment value of these axles. Engineers include them in specifications to make selling easier.

WISCONSIN AXLE CO. Oshkosh, Wis.

Cumulative New Commercial Car Registration Table, August, 1929

Returns for today: Arkansas and South Carolina.

Some of this data has been published previously, but it is given here complete for the convenience of our subscribers. Commercial Car Registrations do not include buses.

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Dover	Fargo	Federal	Ford	G. M. C.	International	Mack	Pierce-Arrow	Relay	Reo	Republic	Rugby	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Miscellaneous	Totals	States
Arkansas			560		20	1	1	1	480	5	68	1			4				1		11	6		5	1164	Arkansas
Delaware			39	1	1				65	4	5	1			2		1		1		2				122	Delaware
Illinois	6	9	718	62	92		15	6	1073	46	140	16			33	1		9	2		40	19		106	2393	Illinois
North Dak.			142	1	8		3		182	11	77				2					3	8		1		438	Nor. Dak.
So. Carolina			193		7		1	1	220	10	7	1				2			1		3	2			448	S. Car.
South Dak.		125	317		10				218					18		1		1	1	23				5	719	So. Dak.
Utah			68		11		2		155	2	3				5		5				4			1	256	Utah
W. Virginia		9	200	5	25		2	6	232	16	36			2	9	3				2	11	1		1	560	West Va.
Wisconsin		1	342	15	52		9	3	503	20	69	3		4	42		1	13	5	5	22	2		17	1128	Wisconsin
Dist. of Col.	3	3	24		2			1	83	13	6	2			2				2		2	5		8	156	D. of Col.

Latest Engineering News of the Industry

Dr. Hoyt Tells How Carballoy Performs

A GREAT advance in the art of cutting metals appears to be in immediate prospect, Dr. Samuel L. Hoyt, research meallurgist of the General Electric Company, declares in a research narrative on "Machining and Unmachinable" issued by the Engineering Foundation.

"Not so many years ago, if you had asked a mechanic to do work on a piece of Hadfield's manganese steel in a lathe or planer or any other machine tool, he would have told you it was unmachinable," says Dr. Hoyt. "He would have given you the same verdict on hardened armor plate and several other very hard, tough steels.

"To suggest cutting a screw thread in a glass rod would have seemed as crazy to our mechanics as making glass hammers. There are many substances which manufacturers would gladly shape by machining if tools could be made that would cut them satisfactorily and economically. Here were problems for researchers and inventors.

"About 1896, Moisson in France, discovered that tungsten and carbon can be combined into tungsten carbide by the reduction of tungsten oxide by carbon, in excess, in the electric furnace. Tungsten has become known to millions of persons as the incandescent element in Mazda lamps.

"For this purpose years of research produced soft tungsten metal which can be drawn into fine wire. In contrast tungsten carbide is the hardest known metallic substance and ranks close to the diamond.

"It will scratch a sapphire, the second hardest natural mineral. Deep scratches in laboratory windows bear testimony to its extreme hardness. But tungsten carbide is too porous and weak to withstand the severe pressures to which metal-cutting tools are subjected.

"More research, and then Schroeter produced 'Hartmetel' by combining cobalt with tungsten carbide. Great increase of strength and toughness was achieved without sacrifice of hardness. This alloy is very dense, being much heavier than steel. In color it resembles steel. It is chemically stable, will take and keep a cutting edge and does not lose these useful properties at elevated temperatures. Tools have been observed cutting nickel steel with their points a bright red heat without ill effects.

"Attracted by the possibilities of a material of such remarkable characteristics, General Electric Company undertook studies in its laboratories and shops. Improvement was effected in the strength of the alloy. Three years' experience by research men and skillful machinists in making tools and using them in a wide variety of operations has taught many lessons.

" 'Carboloy' has a strength more than half as great as that of the remakable modern high-speed tool steels. Of course, it is difficult to work. It will cut a groove in an alundum grinding wheel, which really cuts other hard metals. It can be cut slowly by means of silicon carbide or boron carbide, employing methods which have been developed by experiment, in order to finish tools to the exact shapes required and give them sharp edges.

"Carboloy's pound price is high, but only a small piece is used in each tool, the remainder of the tool being inexpensive steel. The two metals are joined by brazing with copper or by atomic hydrogen welding.

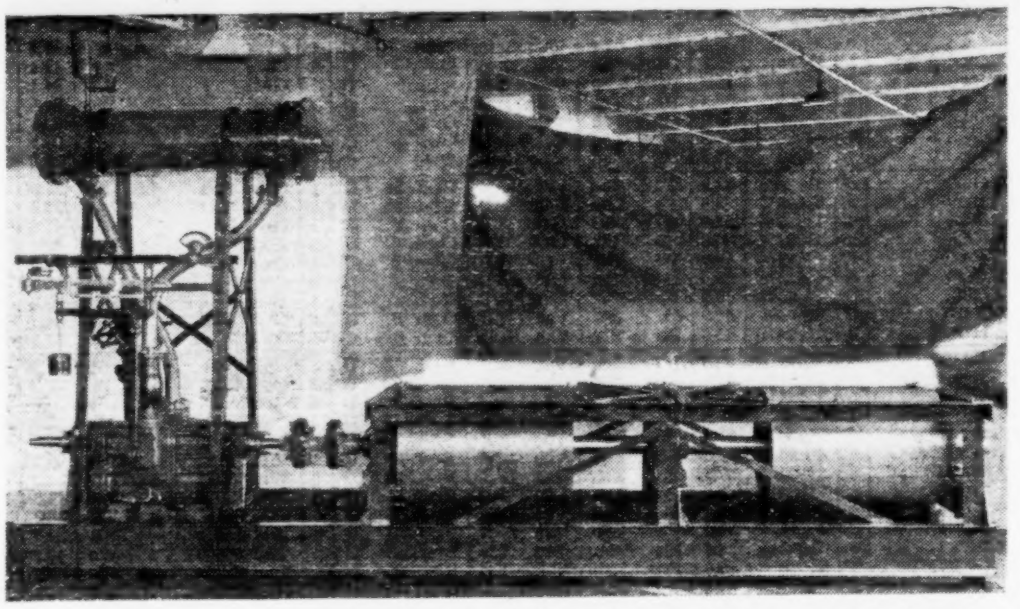
"Not only will Carboloy machine glass, porcelain and hard metals, but it will also cut abrasive carbon, Bakelite, hard rubber, Mycalex (a mixture of fine mica and lead borate), Genelite (a composition of copper, tin and carbon) and other relatively soft materials which wear steel tools rapidly. Carboloy tools when cutting some kinds of materials have a life of 25 to 75 times that of steel tools.

"In testing high-speed steel tools, it is customary to use a 'test log,' that is, a long, round bar of nickel-steel, making a cut in it at about 50 feet per minute. Because of the lack of effect on the Carboloy cutter, however, it was necessary to increase the speed to 200 feet per minute.

"At this speed a high-speed steel cutter failed in 16 seconds, with its edge burned off. The tungsten carbide tool, under identical conditions, was run for an hour before the test was arbitrarily stopped, although the tool was still cutting and capable of continuing for a much longer time.

"Consequently, the carbide tool in many operations effects substantial savings of time and costly labor. In others it gets much better results. With it numerous operations are feasible which are not possible with any other known tool material.

"Nevertheless, the alloys of tungsten carbide have limitations. They will break down, for example, in work involving very heavy pressures on the tools. Carboloy is as yet on the market to a limited extent, although it has been in practical use for the past three years. A great advance in the art of cutting metals appears to be in immediate prospect.



FRONT VIEW OF Cartestometer, with elevating rack removed to show rugged construction.

Pioneer Plane Unit Logs Air Distance

THE Pioneer air log, or air distance recorder, shows the air distance traveled by the aircraft. It corresponds in its function to the odometer (mileage counter) of an automobile speedometer or to the taffrail log of a ship. It is sold by the Pioneer Instrument Company of Brooklyn, N. Y.

Air distance is the yard stick by which the performance of aircraft is measured. If it is known accurately it is possible to express every essential characteristic of a ship in terms which have a substantial and dependable basis.

In order to have a record of the performance of his ship every thorough pilot keeps a "log," noting the time of take-off and landing of every flight, figuring the elapsed time and totaling day by day the flying time. To arrive at the distance he has flown, the best he can do is to multiply his hours by the estimated average air speed—giving a result which is in most cases so far from correct that reliable performance figures cannot be based upon it.

And to maintain this record either the pilot or his mechanic must do a large amount of disagreeable clerical work. All of this "bookkeeping" and inaccuracy is climinated by the use of an air log.

This provides a real basis for all calculations and records: fuel and oil consumption, actual air speed, service between overhauls, costs per passenger or per ton-mile, relatice financial return from different ships per mile flown, etc.

The instrument is also valuable for pilots flying over unfamiliar country, or in weather which more or less obscures the landmarks. By making allowance for the wind, which can be done with a simple ground observation, it is possible to bring a ship down pretty close to a desired field, even under most unfavorable conditions. On such a flight a reliable compass is, of course, necessary, and proper allowance must be made for drift.

The transmitter carries a small propeller which revolves as the airplane goes forward once a mile, actuating a valve which admits vacuum, created by a small but

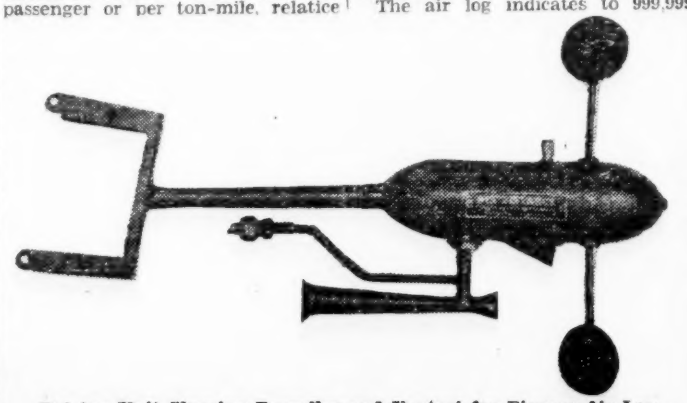
Dial of New Pioneer Air Log

powerful Venturi tube, to an indicator on the instrument board, adding one mile to the recorded distance.

The indicator has a hand which makes one revolution of the dial for each hundred miles. The hundreds are recorded by a wheel counter. The distance traveled is read by adding the indication of the counter to that of the hand. In the illustration the distance is 11,800+27, or 11,827 miles.

The air log was invented by Morris M. Titterington and is manufactured and sold under his patents 1,368,000 and 1,402,270. It is also patented in many foreign countries. Its development covered a long period of years and included much experimentation by the Sperry Gyroscope Company and the Lawrence Sperry Aircraft Company, as well as by the Pioneer Instrument Company.

The air log indicates to 999,999 miles. It may also be calibrated to show nautical miles or kilometers. Price $150 installed.



Driving Unit Showing Propeller and Venturi for Pioneer Air Log

Motorscope Used to Diagnose Troubles

THE Motoscope Corporation of America of Chicago, Ill., is putting out a device for diagnosing engine troubles. The Motoscope, as the device is called, detects ignition, valve, gasoline line and other troubles readily.

It is equipped with a vacameter as well as a device for detecting current leakage and spark characteristics. There is a detector tube in which flame is produced by the current and the condition of the spark plugs. Breaker points can be determined from the flame.

The instruments are boxed in a case with a book of instructions for use illustrated in color. The Motoscope is built of durable Bakelite with distinctive wood-grain finish. The dial hands are of red metal. The dial faces are nickel trimmed.

It is claimed that the use of this device by dealers will promote the sale of parts and repair work of such details as coils, cable, plugs, gaskets, valves, valve springs, breaker box points, piston pins and rings, distributor head assemblies and cylinder grinding jobs. The device lists at $37.50 complete.

MOTOSCOPE TROUBLE-HUNTING device in case ready for use.

Metal Stamping Offers Indoor Cartestometer

THE Metal Stamping Company of Long Island City, New York, announce the completion of a new rear wheel dynamometer, known as the "C-3 Cartestometer."

The Cartestometer is applied to the rear wheels of an automobile in the form of two drums on a heavy shaft which is mounted on ball-bearings. This assembly in turn is mounted on a heavy structural steel frame and is connected directly through a flexible shaft coupling to a Tracy Fluid Dynamometer, which was designed and developed for this service. It has a torque capacity sufficient to stall the engine of the largest size car when the same is operating in either high or intermediate gear, it is claimed.

The absorption unit of the dynamometer is mounted on roller bearings that allow it to rock freely between stops. The outlet of the unit is provided with a control valve, which is used to regulate the resistance to the flow of oil from the absorption unit to the oil cooler and thus control the pull or torque of the dynamometer.

A torque arm is provided on the absorption unit. The torque arm is tied to a large beam scale for measuring the torque. The speed of the absorption unit shaft, which is the same as that of the drum shaft, is indicated on the dial of an electric tachometer, which is graduated to read both revolutions per minute and miles per hour.

The dynamometer, operating as it does with a closed oil system, is provided with an oil cooler mounted horizontally on a structural steel frame above the absorption unit. The oil cooling system provides for the dissipation of heat generated in the absorption unit by the power transmitted from the rear wheels.

With the aid of this Cartestometer, the guessing of road testing as well as the dangers connected therewith are eliminated, it is said. Definite and accurate figures pertaining to the horsepower delivered at the rear wheels, the fuel consumption in miles per gallon or otherwise can be obtained, and it may also be used in locating various noises when the car is in operation at various speeds and loads, helps to check oil pressures, speedometer readings, carburetor and ignition settings and to examine the entire chassis under working conditions when the various moving parts are in motion, the maker claims.

Evansville, Ind., Sept. 19.—The A. L. Maxwell Company, Ford and Lincoln dealer, Second and Vine Streets has purchased property in the North Side section of the city for establishment of used car garage and sales mart.

MAJOR SPECIFICATIONS AND MECHANICAL DETAILS OF

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Am. La France Chief	2	2650	Own	6	3¾x5	33.0	Pw	Str	Vac	Rem	Own	C	4	Tim	Wo	31.2	4	D	156	6200	32x6	32x6 D
Am. La France W	3-4	3850	Own 2 R	4	4¼x6	28.9	P&S	Zen	Vac	A B	Own	C	4	Own	D R	47.4	D	R	160	7200	S 36x5	S 36x5 D
Am. La France S	4-4½	5200	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	54.4	D	R	165	8900	S 36x6	S 36x6 D
Am. La France V	5	5500	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	54.4	D	R	165	9800	S 36x5	S 40x6 D
Am. La France Z	6½	5750	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	63.5	D	R	165	10000	S 36x7	S 40x7 D
Am. La France U	7½	6900	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	—	63.5	D	R	165	10500	S 36x7	S 40x8 D
Am. La Fran. Big Chief	6		Own	6	4½x6	48.6	Pw	Zen	Vac	Rem	Own	C	4	Own	D R	32.8	W	D	226	10600	S 40x8	40x8 D
Autocar S A	1½	2700	Her	6	3¾x4½	33.8	Pb	Zen	Vac	L-N	Br-L 35	U	4	Own S A	Sp	27.9	4	R	150	4400	32x6	32x6
Autocar S D	2	3000	Her	6	3¾x4½	33.8	Pb	Zen	Vac	L-N	Br-L 35	U	4	Own S D	D R	33.9	4	R	150	4850	32x6	32x6 D
†Autocar H	3	3750	Own	4	4½x5½	32.4	C S	Str	Gra	A B	Own T	U	4	Own H	D R	48.9	R	R	114	5800	34x5 S	36x10 S
†Autocar S H	3	4000	Her	6	4⅛x4¾	40.8	Pb	Str	Gra	R B	Own T	U	4	Own H	D R	48.9	R	R	114	5800	34x5 S	36x10 S
Autocar T	3	5000	Her	6	4⅛x4¾	45.9	Pb	Str	Vac	R B	Own T	U	4	Own T	D R	72.5	R	R	187	7100	36x8	36x8 D
†Autocar H S	3½	4100	Own	4	4½x5½	32.4	C S	Str	Gra	A B	Own T	U	4	Own J	D R	55.2	R	R	114	6900	34x6 S	36x12 S
†Autocar S H S	3½	4400	Her	6	4⅛x4¾	45.9	Pb	Str	Gra	R B	Own T	U	4	Own J	D R	55.2	R	R	114	7000	34x6 S	36x12 S
Autocar T S	3½	5350	Her	6	4⅛x4¾	45.9	Pb	Str	Vac	R B	Own T	U	4	Own Chs	D R	81.7	R	R	187	7100	36x8	36x8 D
Autocar S C M	5	5000	Her	6	4½x4¾	48.6	Pb	Str	Vac	R B	Own B	C	4	Own M	D R	72.1	R	R	162	8600	34x7 S	36x14 S
Brockway Junior	1	1195	Wis C	4	3¾x5	22.5	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36001	Sp	21.27	4	Tr	130	3100	30x5	30x5
Brockway J F	1	1195	Wis F	6	3¼x4¼	25.4	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36001	Sp	21.3	4	Tr	137	3450	30x5	30x5
Brockway C J B F	1½	1475	Wis F	6	3¼x4¼	25.4	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 55001	Sp	21.3	4	Tr	149	3650	32x6	32x6
Brockway E	1½	1765	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	L-N	Br-L 30	U	3	Col 55001	Sp	21.0	4	Tr	139½	3650	32x6	32x6
Brockway E N	1½	1965	Wis N	6	3½x4¼	29.4	Pb	Zen	Vac	Aut	Br-L 35	U	4	Col 55001	Sp	31.3	4	Tr	155¾	4400	32x6	32x6
Brockway S	2	2450	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	L-N	Br-L 35	U	4	Wis 4610	D R	38.79	R	Tr	150¼	5100	S 34x4	S 34x3
Brockway S Y	2	2950	Wis Y	6	3⅜x5	27.3	Pb	Zen	Vac	L-N	Br-L 35	U	4	Wis 4610	D R	35.3	4	Tr	151¾	4950	32x6	34x7
*Brockway K	3	3420	Con K	4	4⅛x5¼	27.2	Pw	Zen	Vac	Eis	Br-L 35	C	4	Tim 65700 S	Wo	41.5	R	D	154⅛	5855	S 36x5	S 36x10
Brockway K R	3	3625	Con L	4	4½x5½	32.4	Pw	Zen	Vac	Eis	Br-L 55	C	4	Tim 65700 S	Wo	36.38	R	D	160⅝	6290	S 36x5	S 36x10
Brockway K W	3	3950	Wis H	6	4 x5	38.2	Pb	Zen	Vac	L-N	Br-L 51	U	4	Wis 69300	D R	33.7	R	D	170	6920	34x7	D 34x7
*Brockway R	4	4200	Con L	4	4½x5½	32.4	Pw	Zen	Vac	Eis	Br-L 55	C	4	Tim 66600	Wo	46.8	R	R	164	7890	S 36x5	S 36x12
Brockway T	5-7	5200	Con B 7	4	5 x6	40.0	Pw	Zen	Vac	Eis	Br-L 60	C	4	Tim 68700	Wo	53.5	R	D	175	10065	S 36x6	S 40x14
Chevrolet	½	400	Own	6	3⅛x3¾	26.3	C S	Car	P	Rem	Own	U	3	Own	Sp	12.68	4	R	107	1815	4.50x20	4.50x20
Chevrolet	1½	545	Own	6	3⅛x3¾	26.3	C S	Car	P	Rem	Own	U	4	Own	Sp	30.05	4	R	131	2375	30x5	30x5
Commerce 20 Y	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	D	142	3900	B 30x5	B 30x5
Commerce S 11 Y	1½	1900	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4300	B 30x5	D B 30x5
Commerce 30 Z	1½	2900	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4700	B 34x5	D B 34x5
Commerce 40 Z	2	3240	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vas	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4900	B 36x6	D B 36x6
Commerce 50 Z	2½	4415	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	D	175	7000	S 36x5	S 36x10
Commerce 60 Z	3	4480	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	D	175	7100	S 36x5	S 36x12
Commerce 70 Z	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	D	175	8200	S 36x6	S 36x12
Commerce 80 Z	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	D	175	8400	S 36x6	S 36x14
Day Elder M F	1¼	1345	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Br-L 20A	U	3	Tim 52000 H	Sp	24.2	4	D	131	3100	30x5	30x5
Day Elder G F	1½	2050	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Br-L 20A	U	3	Tim 54000 H	Sp	28.3	4	D	156	3900	30x5	32x6
Day Elder H F	2	2500	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Br-L 35	U	4	Tim 63702 H	Wo	40.7	4	D	156	4400	S 34x4	S 34x7
Day Elder J F	3	3900	Con 18 R	6	4 x4½	38.4	Pb	Zen	Vac	Rem	Br-L 51	U	4	Tim 65000 H	Wo	41.5	4	D	156	6500	S 36x5	S 36x10
Day Elder K 6	4-5	4775	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	Vac	Rem	Br-L 60	C	4	Tim 66702 D	Wo	55.2	R	D	170	8500	S 36x5	S 36x12
Diamond T 151	1	1095	Con 18 E	6	3⅜x4	27.3	Pb	Zen	Gra	Aut	Cov	U	3	Col	Sp	—	4	D	132	2200	30x5	30x5
Diamond T 290	1½	1475	Her W X A	6	3½x4½	29.4	Pb	Zen	Gra	Aut	Cov	U	4	Col	Sp	—	4	D	156¼	4160	30x5	30x5 D
Diamond T 302	2	1650	Her W X B	6	3¾x4½	33.8	Pb	Zen	Gra	Aut	Cov	U	4	Clark	Sp	—	4	D	157¾	4600	32x6	32x6 D
Diamond T 502	2½	2675	Her W X C	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Wo	—	4	D	163	5850	34x7	34x7 D
Diamond T 505	2½	2875	Her W X C	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Wis	D R	—	4	D	171½	5850	34x7	34x7 D
Diamond T 550	2½	2195	Her W X C	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Clark	Sp	—	4	D	165	5400	32x6	32x6 D
Diamond T 601	3	3510	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Br-L	A	4	Tim	Wo	—	4	D	163½	7400	36x8	36x8 D
Diamond T 605	3	3810	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	U	4	Wis	D R	—	4	D	161½	7400	36x8	36x8 D
Diamond T 700	3½	4850	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	A	4	Tim	Wo	—	R	D	162	8100	S 36x5	S 36x10
Diamond T 800	4	5325	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Br-L	A	7	Own	Wo	—	4	D	195⅜	8300	36x8	4WH 36x8
Diamond T 1000	5	5500	Her Y X C 2	6	4½x4¾	48.6	Pb	Zen	Gra	Aut	Br-L	A	4	Tim	Wo	—	R	D	170½	10000	S 36x6	S 40x12
Diamond T 2500	10-12	9750	Wak	6	5 x5¾	60.0	Pb	Zen	Gra	Aut	Br-L	A	7	Tim	Wo	—	4	D	194	13100	S 36x7	S4W 36x12
Dodge Bros.	½	665	Own	4	3⅜x4¼	21.03	Pb	Stw	Vac	N E	Own	U	3	Own	Sp	15.2	4	D	110	1965	29x5.00 B	29x5.00 B
Dodge Bros.	¾	775	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	3	Own	Sp	17.4	4	D	120	2510	31x5.25 B	31x5.25 B
Dodge Bros.	1	995	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	W-G	U	4	Own	Sp	23.8	4	D	130	2920	30x5	30x5
Dodge Bros.	1	1065	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	W-G	U	4	Own	Sp	23.8	4	D	140	2955	30x5	30x5
Dodge Bros.	1½	1345	Own	6	3⅜x3⅞	27.8	Pb	Stw	Vac	N E	Own	U	4	Own	Sp	36.8	4	D	150	3695	32x6	32x6
Dodge Bros.	1½	1415	Own	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	4	Own	Sp	36.8	4	D	165	3810	32x6	32x6
Dodge Bros.	2	1445	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	114	3725	32x6	34x7
Dodge Bros.	2	1545	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	150	3930	32x6	34x7
Dodge Bros.	2	1615	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	165	4070	32x6	34x7
Dodge Bros.	3	1745	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	46.3	4	D	135	4225	32x6	32x6 D
Dover	¾	595	Own	6	2⅞x4½	18.27	P&S	Mar	Vac	Aut	Own	U	3	Own	Sp	..	4	4	110	2150	30x5	31x5.50
Durant Com. Chassis	½	495	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	C	3	Own	Sp	16.16	4	4	107	1670	28x4.75	28x4.75
Fargo Packet	½	545	Own	6	3 x4⅛	21.6	Pb	Str	Vac	N E	Own	U	3	Own	Sp	14.29	4	Tr	—	1835	5.00x19	5.00x19
Fargo Clipper	¾	725	Own	6	3⅛x4¼	23.4	Pb	Str	Vac	Rem	Own	U	3	Own	Sp	15.53	4	Tr	—	2325	5.50x18	5.50x18
Fargo Freighter	1	795	Own	6	3 x4¼	21.6	Pb	Str	Vac	N E	Own	U	4	Own	Sp	37.19	4	Tr	133	2785	6.00x20	32x6
Ford A A	1½	540	Own	4	3⅞x4¼	24.0	P&S	Zen	Gra	Own	Own	U	3	Own	Wo	16.1	4	4	131½	2282	6.00x20	32x6
F. W. D.—H	2	3300	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Cotta	C	4	Own	St	38.1	4	R	121	5300	34x7	34x7
F. W. D.—H 6	2	3425	Wak	6	3½x4½	29.4	Pb	Zen	Vac	Eis	Br-L	U	4	Own	St	35.0	4	R	133	5500	34x7	34x7
F. W. D.—B	3	4200	Own	4	4¾x5½	36.1	Pb	Str	Gra	Eis	Own	C	3	Own	St	35.6	4	R	124	6460	36x6 S	36x6 S
F. W. D.—B 5	3	4525	Own	4	4¾x5½	36.1	Pb	Str	Gra	Eis	Own	C	5	Own	St	88.6	4	R	132	6800	36x6 S	36x6 S
F. W. D.—U 6	3½	4575	Wak	6	4 x4¾	38.6	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7200	36x6 S	36x6 S
F. W. D.—BTL 4	2	3900	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Br-L	C	7	Own	St	84.7	4	R	120	6000	36x8	36x8
F. W. D.—B T	3	4742	Own	4	4¾x5½	36.1	Pb	Str	Vac	Eis	Own	C	5	Own	St	101.0	4	R	133¾	7700	40x7 S	40x5 S D
F. W. D.—U 4	3	4575	Own	4	4¾x5½	36.1	Pb	Str	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7000	36x6 S	36x6 S
F. W. D.—X 6	6	6500	Wak	6	4¼x4¾	43.3	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	4	4	170	9500	36x8	36x8
Garford 20 Y	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	D	142	3900	R 30x5	B 30x5
Garford S 11 Y	1½	1900	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4300	B 30x5	D B 30x5
Garford 30 Z	1½	2990	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4700	B 34x5	D B 34x5
Garford 40 Z	2	3240	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4900	B 36x6	D B 36x6
Garford 50 Z	2½	4419	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	D	175	7000	S 36x5	S 36x10
Garford 60 Z	3	4480	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	D	175	7100	S 36x5	S 36x12
Garford 70 Z	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	D	175	8200	S 36x6	S 36x12
Garford 80 Z	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	D	175	8400	S 36x6	S 36x14
Gen. Mot. T 11-1001	*3800	625	Pontiac	6	3⅛x3⅞	26.3	Pb	Mar	P	Rem	Pontiac	U	3	Pontiac	Sp	14.67	4	D	109¾	1980	5.00x19 B	5.50x19 B
Gen. Mot. T 19-2001	*8000	1015	Pontiac	6	3⅛x3⅞	26.3	Pb	Mar	P	Rem	Mun	U	4	Tim 5261-N	Sp	34.11	4	D	127¾	3075	32x6	34x7
Gen. Mot. T 19-2002	*8000	975	Pontiac	6	3⅛x3⅞	26.3	Pb	Mar	P	Rem	Mun	U	4	Tim 5261-N	Sp	34.11	4	D	127¾	3000	30x5	30x5 D
Gen. Mot. T 19-2003	*6000	895	Pontiac	6	3⅛x3⅞	26.3	Pb	Mar	P	Rem	Mun	U	4	Tim 5261-N	Sp	34.11	4	D	127¾	2925	5.50x20 B	32x6
Gen. Mot. T 30-3001	*10000	1530	Buick	6	3⅛x4⅝	26.3	Pb	Mar	P	Rem	Mun	U	4	Eat 1616	Sp	28.6	4	D	136	4200	32x6	36x8
Gen. Mot. T 30-3002	*10000	1505	Buick	6	3⅛x4⅝	26.3	Pb	Mar	P	Rem	Mun	U	4	Eat 1616	Sp	28.6	4	D	136	4125	32x6	32x6 D
Gen. Mot. T 30-3003	*8000	1395	Buick	6	3⅛x4⅝	26.3	Pb	Mar	P	Rem	Mun	U	4	Eat 1616	Sp	28.6	4	D	136	4075	6.00x20 B	34x7
Gen. Mot. T 42-4001	*12000	1885	Buick	6	3⅛x4⅝	26.3	Pb	Mar	P	Rem	Mun	U	4	Own	Sp	33.38	4	D	136	4690	32x6	38x9
Gen. Mot. T 42-4002	*12000	1790	Buick	6	3⅛x4⅝	26.3	Pb	Mar	P	Rem	Mun	U	4	Own	Sp	33.38	4	D	136	4640	32x6	32x6 D
Gen. Mot. T 42-4003	*10030	1685	Buick	6	3⅛x4⅝	26.3	Pb	Mar	P	Rem	Mun	U	4	Own	Sp	33.38	4	D	136	4510	7.00x20 P	36x8
Gen. Mot. T 60-5001	*16000	3215	Buick	6	3⅝x5	31.5	Pb	Mar	P	Rem	Mun	U	4	Tim 65706-N	Wo	44.81	4	D	140	6090	38x7	44x10
Gen. Mot. T 60-5002	*18000	3160	Buick	6	3⅝x5	31.5	Pb	Mar	P	Rem	Mun	U	4	Tim 65706-N	Wo	44.81	4	D	140	6425	36x8	36x8 D
Gen. Mot. T 60-5003	*14500	2800	Buick	6	3⅝x5	31.5	Pb	Mar	P	Rem	Mun	U	4	Tim 65706-N	Wo	44.81	4	D	140	6090	36x6	36x6 D
Gen. Mot. K 102-6001	*28000	4250	Own 89	4	4½x6½	32.4	Pw	Zen	Vac	Eis	Mun	C	7	Tim 67600	Wo	86.3	R	R	160	9520	36x6 S	40x14 S
Gen. Mot. K 102-6002	*28000	4350	Own 89	4	4½x6½	32.4	Pw	Zen	Vac	Eis	Mun	C	7	Tim 67600	Wo	86.3	R	R	184	9600	36x6 S	40x14 S
Gramm B	1½	1395	Lyc S	6	3¼x4½	25.3	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Sp	32	4	R	140	3300	30x5	30x5 D
Gramm C	2	1795	Lyc T S	6	3⅞x5	36.2	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Sp	29	4	R	160	3800	32x6	32x6 D
Gramm D	2½	1995	Lyc T S	6	3⅞x5	36.2	Pb	Zen	Vac	Aut	Ful	U	4	Wis	D R	30	4	R	160	4920	32x6	32x6 D
Gramm E	3	2795	Lyc T S	6	3⅞x5	36.2	Pb	Zen	Vac	Aut	Ful	U	4	Wis	D R	35	4	R	150	5200	34x7	34x7 D
Gramm EY	3	3535	Con 20 R	6	4⅛x4¾	36.04	Pb	Zen	Vac	Aut	Ful	U	4	Wis	D R	26	4	R	190	6750	32x6	32x6 D
Gramm GY	4	4345	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	P	L-N	Ful	U	4	Wis	D R	28	4	R	210	7200	34x7	34x7 D
Gramm HY	5	9545	Con 16 H	6	4¾x5¾	54.15	Pb	Zen	P	L-N	Ful	U	4	Wis	D R	25.2	4	R	236	9600	36x8	36x8 D
Gramm T-35	3	3595	Lyc T S	6	3⅞x5	36.2	Pb	Zen	Vac	Aut	Ful	U	4	Wis	D R	39.6	4	R	173	7100	36x5 S	36x10 S

1929 COMMERCIAL CARS BUILT IN THE UNITED STATES

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Gramm T-45	4	3995	Lyc T S	6	3⅞x5	36.2	Pb	Zen	Vac	Aut	Ful	U	4	Wis	D R	39.6	4	R	173	7600	36x5 S	36x12 S
Gramm T-60	5	4745	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	Vac	Aut	Ful	U	4	Wis	D R	—	4	R	173	8700	36x6 S	36x14 S
Hahn 7 H	¾-1	1098	——	6	2⅞x4¾	19.84	P	Zen	Vac	Aut	Br-L	U	3	——	Sp	5.8	4	D	124	3100	——	——
Hahn 17 H	1-1½	1430	Cont	6	3⅜x4	—	P	Zen	Vac	—	Br-L	U	4	Tim	—	5.8	4	D	142	3750	——	——
Hahn 37 H-37 H L	2-2½	1925	Cont	6	3⅜x4	—	P	Str	Vac	—	Br-L	U	4	Tim	—	5⅝	4	D	153	4600	——	——
Hahn 39 H-39 H L	2½-3	2898	Cont	6	4 x4⅛	38.4	P	Str	Vac	—	Br-L	U	4	Tim	—	6⅛	4	D	164	5800	——	——
Hahn 47 H B-47 H B L	3-3½	3700	Cont	6	4 x4½	38.4	P	Str	Vac	—	Br-L	U	4	Tim	—	7.8	4	D	151	6900	——	——
Hahn 47 H D-47 H D L	3½-4	3900	Cont	6	4 x4½	38.4	P	Str	Vac	—	Br-L	U	4	Tim	—	7.8	4	D	151	7500	——	——
Hahn 67 H-67 H L	4-5	4950	Cont	6	4⅜x4¾	45.94	P	Str	Vac	—	Br-L	U	4	Tim	—	10.8	4	D	151	8842	——	——
Indiana 200	1	1195	Wis F	6	3¼x4½	25.3	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36000	Sp	20.71	4	Tr	137	3400	30x5	30x5
Indiana 300	1½	1475	Wis F	6	3¼x5¼	25.3	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 55001	Sp	21.26	4	Tr	149	3650	32x6	32x6
Indiana 111 X W	2	1850	Her Ox	4	4 x5	25.6	Pb	Str	Vac	Eis	Br-L 35	U	4	Wis 4611	Sp	36.60	R	Tr	120	3830	32x6	32x6 D
Indiana 400	2	2495	Wis Y	6	3⅜x5	27.3	Pb	Str	Vac	Aut	Br-L 35	U	4	Cla B 506	Sp	30.33	4	Tr	157	4800	32x6	34x7
Indiana 115 A	2½	2740	Her Ox	4	4 x5	25.6	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 720	Sp	42.80	R	Tr	132	5000	32x6	34x7 D
Indiana 615 A	2½	3070	Wis Y	6	3⅜x5	27.3	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 720	Sp	30.33	R	Tr	136	5190	32x6	34x7 D
Indiana 126	3	3495	Her L	4	4½x5¾	32.4	Pb	Str	Vac	Eis	Br-L 557	C	7	Tim 65704	Wo	80.7	R	Js	162½	7400	36x5	36x10 S
Indiana 127	3	3190	Her K	4	4¼x5¾	28.9	Pb	Str	Vac	Eis	Br-L 51	U	5	Cla B 720	Sp	41.72	R	R	141	6490	32x6	34x7 D
Indiana 626	3	4185	Wis H	6	4 x5	38.4	Pb	Str	Vac	Eis	Br-L 55	C	7	Tim 65704	Wo	80.7	R	Js	168½	7625	36x6 S	36x10 S
Indiana 627	3	3725	Wis H	6	4 x5	38.4	Pb	Str	Vac	Aut	Br-L 55	U	4	Cla B 720	Sp	42.80	R	R	162½	6500	36x5 S	36x10 S
Indiana 127 A W	3	3625	Her K	4	4¼x5¾	28.9	Pb	Str	Vac	Eis	Br-L 51	U	5	Wis 69311	Sp	41.72	R	Tr	141	6800	32x6	34x7 D
Indiana 627 A W	3	3925	Wis H	6	4 x5	38.4	Pb	Str	Vac	Eis	Br-L 51	U	5	Wis 69311	Sp	41.72	R	Tr	147	6800	32x6	34x7 D
Indiana 138	4	4380	Her L	4	4½x5¾	32.4	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 66700 D	Wo	83.1	R	R	162½	7850	36x5	36x12 S
Indiana 638	4	4955	Wis H	6	4 x5	38.4	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 66700 D	Wo	83.1	R	R	168½	8100	36x5	36x12 S
Indiana 41	5	5460	Her G	4	4¾x5¾	36.1	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 68700 D	Wo	95.0	R	R	172	9600	36x6	40x12 S
Int. Harvester Sp. Del.	¾	720	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	Rem	Mec	U	3	Eat 502 R	Sp	15.1	4	4	124	2200	30x5.25	30x5.25
Int. Harv. 6 Spd. Spec.	1	820	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	Rem	Mec	U	3	Eat 1124	Sp	*52.6	4	4	124	2430	30x5	30x5
Int. Harvester S-24	1¼	1160	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	Rem	Own	U	3	Eat 1002	Sp	21.3	4	4	130	3200	30x5	30x5
Int. Harvester S-26	1¼	1310	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	3	Eat 1002	Sp	21.3	4	4	130	3250	30x5	30x5
Int. Harvester SF-34	1½	1450	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	Rem	Own	U	3	Eat 1502	Sp	22.6	4	4	140	3520	30x5	32x6
Int. Harvester SF-36	1½	1600	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	3	Eat 1502	Sp	22.6	4	4	140	3570	30x5	32x6
Int. Harvester SD-44	2	1590	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	A B	Own	U	4	Eat 2002	Sp	40.6	4	4	117	3700	30x5	32x6
Int. Harvester SD-46	2	1740	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	A B	Own	U	4	Eat 2002	Sp	40.6	4	4	117	3750	30x5	32x6
Int. Harvester SF-46	2	1950	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	4	Eat 2002	Sp	40.6	4	4	140	4000	32x6	32x6 D
Int. Harvester 54-C	2½	3200	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 428	Ch	51.8	R	D	140	6400	36x5	36x10
Int. Harvester 54	2½	3550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Eat 54 65000	D R	53.7	R	D	140	6345	36x5	36x8
Int. Harvester 74-C	3½	4550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 427	Ch	*86.0	R	D	154	8715	36x6	40x12
Int. Harvester 74	3½	4550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Eat 74 1000	D R	61.6	R	D	160	8175	36x6	40x12
Int. Harvester 104-C	5	4800	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 427	Ch	86.0	R	D	154	8890	36x6	40x14
Int. Harvester HS-54	2½	3850	H-S 151	4	4¼x5½	28.9	Pb	Zen	Vac	R B	Own	U	5	Eat 54 65000	D R	60.5	4	4	*148	8000	36x5	36x12 S
Int. Harvester HS-54-C	2½	3850	do 151	4	4¼x5½	28.9	Pb	Zen	Vac	R B	Own	U	5	Own A M 428	Ch	63.8	4	4	*148	8665	34x5 S	36x12 S
Int. Harvester HS-74	3½	4850	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Eat 74 1000	D R	70.5	4	4	*160	10700	34x5 S	36x7 D
Int. Harvester HS-74-C	3½	4850	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Own A M 427	Ch	79.1	4	4	*160	11000	34x6 S	36x7 D
Int. Harv'st'r NS-104-C	5	5500	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Own A M 427	Ch	90.5	4	4	*160	11095	34x6	36x8 D
*Larrabee 20	1	1595	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Gra	Rem	Br-L	U	3	Col	Sp	4.15	4	D	142	4170	30x5	30x5
*Larrabee 30	1½	1875	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Gra	Rem	Br-L	U	3	Col	Sp	4.15	4	D	161	4550	32x6	32x6
*Larrabee 40	2	2965	Con 16 R	6	4 x4⅛	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Wis	D R	5.35	4	D	176	5950	32x6	32x6 D
*Larrabee 50	2½	3285	Con 16 R	6	4 x4⅛	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Wis	D R	5.35	4	D	183	6030	32x6	32x6 D
*Larrabee 60	3	3980	Con 18 R	6	4 x4½	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Tim	Wo	5.35	4	D	195	7140	34x7	34x7 D
*Larrabee 70	3½	4600	Con 20 R	6	4⅛x4¾	40.8	Pb	Zen	Gra	Rem	Br-L	C	7	Tim	Wo	9.5	4	D	205	7740	34x7	34x7 D
Larrabee 80	5	5200	Con 21 R	6	4⅜x4¾		Pb	Zen	Gra	Rem	Br-L	C	7	Tim	Wo	—	4	D	205	9150	36x8	36x8 D
Mack BB	1½	3500	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	Own	U	4	Own	Hyp.	Opt.	4	D	165½	——	32x6	32x6 D
Mack BB	1½	3660	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	Own	U	4	Own	Hyp.	Opt.	4	D	177½	——	32x6	32x6 D
Mack AB	1½-2	3100	Own	4	4¼x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	Ch.	Opt.	R	D	2-Opt.	——	36x4 S	36x7 S
Mack AB	1½-2	3550	Own	4	4¼x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	D R	Opt.	R	D	2-Opt.	——	36x4 S	36x7 S
Mack AB	2½-3	3500	Own	4	4¼x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	Ch.	Op	R	D	2-Opt.	——	36x4 S	36x8 S
Mack AB	2½-3	3950	Own	4	4¼x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	D R	Opt.	R	D	2-Opt.	——	36x4 S	36x8 S
Mack BJ	3-4	5800	Own	6	4½x5½	48.6	P&S	Str	Vac	N E	Own	C	4	Own	D R	Opt.	4	D	3-Opt.	——	36x8	36x8 D
Mack AK	3½-5	5150	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	4	Js	3-Opt.	——	36x5 S	36x5 D S
Mack AK	3½-5	5250	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	C	4	Own	D R	Opt.	4	D	3-Opt.	——	36x5 S	36x5 D S
Mack AC	3½-5	4950	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	3-Opt.	——	36x5 S	40x10 S
Mack AC	5½-7	5500	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	3-Opt.	——	36x5 S	40x12 S
Mack AC	7½	6000	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	3-Opt.	——	36x7 S	40x14 S
Mack AP	7½	9500	Own	6	5 x6	60.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	Js	191	——	36x7 S	40x8 D S
Mack AB Tractor	5-6	3500	Own	4	4½x5	28.9	P&S	Str	Gra	R B	Own	U	4	Own	Ch.	Opt.	R	D	122½	——	36x4 S	36x4 D S
Mack AK Tractor	7-10	5150	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	4	Js	128	——	34x5 S	36x5 D S
Mack AC Tractor	7-10	4950	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	128	——	34x5 S	36x5 D S
Mack AC Tractor	11-14	5500	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	128	——	34x6 S	36x6 D S
Mack AC Tractor	15	6000	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	Js	R	128	——	34x7 S	36x7 D S
Mack AP Tractor	15	9500	Own	6	5 x6	60.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	R	Js	191	——	34x7 S	36x7 D S
Mack AC 6-wheel	10	7500	Own	4	5 x6	40.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	4 R	Js	2-Opt.	——	36x7 S	40x12 S
Mack AP 6-wheel	10	12000	Own	6	5 x6	60.0	P&S	Str	Gra	R B	Own	J	4	Own	Ch.	Opt.	4 R	Js	2-Opt.	——	36x7	40x12 S
Moreland A-6	*6800	1275	Con 34 L	6	2⅞x4¾	19.84	Pb	Zen	Vac	Aut	Br-L 20	U	4	Tim 52000 H	Sp	24.17	4	D	134	3000	32x6.75	32x6.75
Moreland R R-6	*9300	1850	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	P	Aut	Br-L 35	U	4	Tim 54000 H	Sp	32.95	4	D	158½	4000	32x6	32x6
Moreland B-6	*12000	2200	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	P	Aut	Br-L 35	U	4	Tim 63721 H	Wo	34.8	4	D	158½	4500	34x7	34x7
Moreland E-6	*15000	3600	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	4	Tim 65000 H	Wo	34.8	*4	D	182	6000	34x7	34x7 D
Moreland Ex. 6	*19000	3750	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	5	Tim 65704 N	Wo	46.0	*4	D	182	6500	36x4 S	36x8 S
Moreland E D -6	*23000	4900	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	5	Own	Wo	52.2	*4	D	196	8500	36x8	36x8
Moreland H-6	*22000	4650	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	P	Aut	Br-L 55	C	7	Tim 66702 W	Wo	82.3	*R	D	196	8000	36x5 S	36x10 S
Moreland H D S-6	*30000	5850	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	P	Aut	Br-L 60	C	7	Own	Wo	81.6	*4	D	220	10560	36x6 S	36x8
Moreland S D-6	*34000	6450	Her YXC 2	6	4½x4¾	48.6	Pb	Zen	P	Aut	Br-L 60	C	7	Own	Wo	89.0	*4	D	221	11500	36x7 S	36x10 S
Moreland T T-6	*34000	8000	Con 15 H	6	4½x5¾	48.6	Pw	Str	P	Aut	Br-L 70	C	7	Own	Wo	98.5	*4	D	221	12500	36x7 S	36x10 S
*Fleet Arrow F A-1	1½-2	2450	Own F A	6	3½x5	29.5	Pb	St:	A P	Rem	Own	U	3	Own	Sp	33.3	4	Tr	140	3950	32x6.00	34x7
*Pierce-Arrow F A-1	1½-2	2450	Own	6	3½x5	29.4	Pw	Str	P F	Del	Own	U	3	Tim	St	21.4	4	Tr	140	4100	32x6	32x6 D
*Pierce-Arrow X A-1	2	3500	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	4	Own	Wo	44.2	D	R	150	6750	36x4	36x5 D S
*Pierce-Arrow X B-1	3	3750	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	4	Own	Wo	48.1	D	R	150	6830	36x5	36x5 D S
*Pierce-Arrow H B-1	5	4500	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	7	Own	Wo	95.0	D	R	156	8450	36x5	36x6 D S
*†PierceArrow W C-1	4	5100	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	41.5	D	R	162	8780	36x5	36x6 D S
*†Pierce-Arrow R D-1	5	5400	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	40.5	D	R	162	9440	36x6	36x7 D S
*†Pierce-Arrow R F-1	7½	5600	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	51.9	D	R	168	10320	36x6	40x8 D S
†Pierce-Arrow R F-T	7½	5600	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	51.9	D	R	132	940	36x6	36x8 D S
Relay 20 B	1	1700	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Own	Relay	25.7	4	D	142	4100	B 30x5	B 30x5
Relay S 11 B	1½	1900	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Own	Relay	30.0	4	D	162	4500	B 30x5	D B 30x5
Relay 30 A	1½	2990	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Own	Relay	34.5	4	D	168	5300	B 34x5	D B 34x5
Relay 40 A	2	3240	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Own	Relay	34.5	4	D	168	5500	B 36x6	D B 36x6
Relay 50 C	2½	4415	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	D	175	7300	B 36x6	S 36x10
Relay 60 C	3	4480	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	D	175	7450	B 36x6	S 36x12
Relay 70 C	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Cov	C	8	Own	Relay	84.2	R	D	175	8600	B 36x6	S 40x12
Relay 80 C	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Cov	C	8	Own	Relay	84.2	R	D	175	8800	B 36x6	S 40x14
Reo B A	½	895	Con 16 E	6	3⅜x4	27.3	Pb	Sch	Vac	Rem	W-G	U	3	Sal	Sp	14.63	4	Tr	115	2290	28x5.25	28x5.25
Reo D A	1	995	Con 16 E	6	3⅜x4	27.3	Pb	Sch	Vac	Rem	W-G	U	3	Own	Sp	18.4	4	Tr	123	2755	30x5	30x5
Reo D C	1	1075	Con 16 E	6	3⅜x4	27.3	Pb	Sch	Vac	Rem	W-G	U	3	Own	Sp	18.4	4	Tr	138	2850	30x5	30x5
Reo F A	1½	1295	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	22.96	4	Tr	137	3525	32x6	32x6
Reo F E	1½	1395	Own	6	3¾x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	22.96	4	Tr	152	3700	32x6	32x6
Reo F F	1½	1395	Own	6	3¾x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	22.96	4	Tr	156	3750	32x6	32x6
Reo F H	2	1545	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	37.6	4	Tr	142	4165	32x6	32x6 D

Major Specifications and Mechanical Details of 1929 Commercial Cars Built in the United States

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Reo F C	2	1595	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	37.62	4	Tr	152	4025	32x6	32x6 D
Reo F D	2	1695	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	37.62	4	Tr	168	4075	32x6	32x6 D
Reo G A	3	2035	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	41.05	4	Tr	163	4625	32x6	32x6 D
Reo G C	3	2140	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	41.05	4	Tr	179	4850	32x6	32x6 D
Reo G D	3	1985	Own	6	3⅜x5	27.3	Pb	Sch	Vac	Rem	Own	U	4	Own	Sp	46.2	4	Tr	134	4570	32x6	32x6 D
Republic Fleetmaster	*7000	1295	Lyc	6	3¼x4½		Pb	Zen	Vac	Aut	Br-L	U	4	Cla	Sp	28.3	4	Tr	144	3300	6.00x20 B	32x6
Republic F-1	*12000	2195	Lyc	6	3¼x4½		Pb	Zen	Vac	Aut	Ful	U	4	Eat	Sp	43	4	D	155	4850	32x6	32x6 D
Republic H-1	*15000	2985	Lyc	6	3⅞x5		Pb	Zen	Vac	Aut	Ful	U	4	Eat	Sp	36	4	D	163	5750	34x7	34x7 D
Republic L-1	*18000	3595	Lyc	6	3⅞x5		Pb	Zen	Vac	Aut	Ful	U	4	Eat	D R	48.0	4	D	180	6900	36x8	36x8 D
Republic M-1	*20000	3800	Waukesha	6	4 x4¾		Pb	Zen	Vac	Aut	Br-L	U	5	Eat	D R	53	D	R	171	6900	36x8	36x8 D
Rugby Model 401	1	*775	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	C	3	Own	Sp	14.79	4	4	107	2325f	28x4.75	28x4.75
Selden 7	¾–1	1093	Con 29 L	6	2⅞x4¾	19.6	Pb	Zen	Vac	Aut	Br-L	U	3	Tim	Sp	23.2	4	D	124	3100	30x5	30x5
Selden 17C	1–1½	1430	Con 18 E	6	3⅜x4	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	31.0	4	D	142	3750	30x5	30x5
Selden 37C	2–2½	1950	Con 15 C	6	3⅜x4⅝	27.3	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	31.0	4	D	151	4600	30x5	30x5 D
Selden 39C	2½–3	2898	Con 16 R	6	4 x4⅛	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	33.0	4	D	164	5800	32x6	32x6 D
Selden 47 CD	3½–4	3900	Con 18 R	6	4 x4½	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Wis	D R	41.7	4	D	164	6900	34x7	34x7 D
Selden 67C	4– 5	4950	Con 21 R	6	4⅜x4¾	45.9	Pb	Str	Vac	Aut	Br-L	C	7	Wis	D R	95.7	4	D	164	9000	36x8	36x8 D
Selden 77B	5–7	——	Con 16 H	6	4⅜x5¾	54.1	Pb	Str	Vac	Aut	Br-L	C	7	Wis	D R	95.7	R	D	171	10000	36x8	S 36x12
Selden 47CB	3–3½	3700	Con 18 R	6	4 x4½	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	36.5	4	D	164	6700	34x7	34x7 D
Service 20 Y	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	D	142	3900	B 30x5	B 30x5
Service S 11 Y	1½	1990	Bud H S 6	6	3⅜x4½	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4300	B 30x5	D B 30x5
Service 40 Z	2	3240	Bud D S 6	6	3⅝x5	31.2	Pw	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4900	B 36x6	D B 36x6
Service 60 Z	3	4480	Bud B U S	6	4 x5⅛	38.4	Pw	Zen	Vac	Aut	Br-L	U	5	Tim	Wo	63.0	4	D	175	7100	S 36x5	S 36x12
Service 80 Z	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pw	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	R	D	175	8400	S 36x6	S 36x14
Standard 2½ K	2½-2⅝	3200	Con K 4	4	4⅛x5¼	27.2	Pb	Str	Vac	Aut	Br-L 35	C	4	Tim 65600	Sp Wo	71.8	R	D	147	5400	36x5 S	36x8 S
Standard 3½ K	3½–5	4350	Con L 4	4	4½x5½	32.4	Pb	Str	Vac	Aut	Br-L 55	C	7	Tim 66700	Sp Wo	83.0	R	D	160	7485	36x5 S	36x12 S
Standard 5 K	5–7	5250	Con B 5	4	4¾x6	36.1	Pb	Str	Vac	Aut	Br-L 60	C	7	Tim 68700	Sp Wo	83.6	R	D	164	8700	36x6 S	40x14 S
*Stewart Buddy 21	¾	895	Lyc W S G	6	2⅞x4¾	19.8	Pb	Str	Gra	Rem	W-G	U	3	Sal	Sp	30.0	4	D	118	2694	30x5.50	30x5.50
*Stewart Buddy 21 X	1	995	Lyc W S G	6	2⅞x4¾	19.8	Pb	Str	Vac	Rem	W-G	U	3	Sal	Sp	30.0	4	D	128	2806	30x5	30x5
*Stewart 16	1¼	1295	Lyc C T	4	3¾x5	22.5	Pb	Str	Vac	Rem	Ful	U	4	Cla	Sp	24.0	4	D	130	3326	32x6	32x6
*Stewart 16 X	1¼	1295	Lyc 4 S L	6	3¼x4½	25.3	Pb	Str	Vac	Rem	Ful	U	4	Cla	Sp	24.0	4	D	130	3326	32x6	32x6
Stewart 26 X W	2	2290	Lyc T	6	3⅝x5	31.5	Pw	Str	Vac	Rem	Ful	U	4	Tim	Wo	29.0	4	D	165	5095	32x6	32x6 D
*Stewart 18 X	2½	2690	Lyc T	6	3⅝x5	31.5	Pw	Str	Vac	Rem	Ful	U	4	Tim	Wo	29.0	4	D	165	5788	32x6	32x6 D
Stewart 19 X	3½	3690	Lyc F	6	3⅞x5	36.2	Pw	Str	Vac	Rem	Ful	C	12	Tim	Wo	105.1	4	D	165	6990	36x5	36x10
*Stewart 22 X	4	4200	Lyc F	6	3⅞x5	36.2	Pw	Str	Vac	Rem	Ful	U	12	Tim	Wo	34.8	4	D	165	7990	36x5	36x12
Stewart 28 X	1½	1495	Lyc 4 S L	6	3¼x4½	25.3	Pb	Str	Vac	Rem	Ful	U	4	Cla	Sp	27.3	4	D	136	3840	30x5	30x5 D
Stewart 29 X	2	1695	Lyc 4 S L	6	3¼x4½	25.3	Pb	Str	Vac	Rem	Ful	U	4	Cla	Sp	27.3	4	D	145	4188	32x6	32x6 D
Stewart 27 X	5–7	5700	Waukesha	6	4⅜x5⅛	45.99	Pw	Str	Vac	Rem	Ful	U	8	Tim	Wo	93.81	4	D	165	9700	36x7	40x7 D
Studebaker GN-P	¾	845	Own	6	3⅜x4⅛	27.3	P C	Str	P	Rem	Own	U	3	Own	Sp	14.3	4	4	115	——	19x6.00	19x6.00
Studebaker GN-S	1	1045	Own	6	3⅜x4⅛	27.3	P C	Str	P	Rem	Own	U	3	Own	Sp	13.8	4	Js	130	——	20x6.00	30x3
Studebaker GK-N	1	1095	Own	6	3⅜x4⅝	27.3	P C	Str	P	Rem	Own	U	3	Own	Sp	13.7	4	Js	146	2830	30x5	30x5
Studebaker GN-N	1¼	1245	Own	6	3⅜x4⅛	27.3	P C	Str	P	Rem	Clark	U	4	Clark	Sp	33.5	4	Js	146	——	30x5	32x6
Studebaker 77	2½	2285	Own	8	3½x4⅜	39.2	P C	Str	P	Rem	Ful	U	3	Eat	Sp	19.8	4	Js	158	4745	20x6.75 B	20x6.75 B
Studebaker 88	3	2985	Own	8	3½x4⅜	39.2	P C	Str	P	Rem	Ful	U	3	Eat	Sp	19.8	4	Js	184	4920	20x7.50 B	20x7.50
Studebaker 99	3½	3485	Own	8	3½x4⅜	39.2	P C	Str	P	Rem	Ful	U	4	Eat	Dr	24.6	4	Js	184	5400	20x7.50 B	20x7.50
Victor 35	1½	1895	Con	6	3⅜x4	27.3	Pb	Zen	Vac	Rem	Cov	U	3	Tim	Sp	—	4	D	144	3200	30x5	30x5 D
Victor 45	2½	2495	Her	6	3¾x4½	33.7	Pb	Zen	Vac	Rem	Ful	U	4	Wis	D R	—	4	D	148	4500	32x6	32x6 D
Victor 75	3½	3895	Her	6	4 x4½	38.4	Pb	Zen	Vac	Rem	Ful	U	4	Wis	D R	—	4	D	162	6000	34x7	34x7 D
Whippet 96 A	½	380	Own 96 A	4	3⅛x4¾	15.6	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	14.75	4	R	103¼	1659	28x4.75	28x4.75
Whippet 6 C-101	1½	645	Own 98 A	6	3¼x3⅞	23.4	Pb	Til	Vac	Aut	Ful	U	4	Cla-B 364	Sp	33.5	4	R	131	2540	30x5	30x5
†White 15 B	1	1545	Own G K A	4	3¾x5⅛	22.5	C S	Zen	Vac	L-N	Own	C	4	Own	Sp	18.6	R	R	133½	3242	30x5	30x5
†White 57	1¼	2725	Own G R C	4	4 x5¾	25.6	Pw	Zen	Vac	L-N	Own	U	4	Own	Sp	19.3	R	R	146	3755	32x6	32x6
†White 20 A	1½	2125	Own G K A	4	3¾x5⅛	22.5	C S	Zen	Vac	L-N	Own	C	4	Own	D R	32.1	R	R	145½	4412	34x5	34x5 D P
†White 56	2	3125	Own G R C	4	4 x5¾	25.6	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	26.2	R	D	165	5096	36x4 S	36x7 S
†White 51 A	2½	3750	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	35.5	R	D	170	6256	36x5 S	36x8 S
†White 55	3½	4650	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	I G	66.1	D	R	174	8402	36x5 S	40x5 S D
†White 52 T	3½	4700	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	I G	76.5	D	R	129½	8126	36x5 S	40x5 S D
†White 52	5	5100	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	5	Own	I G	92.3	D	R	174	9184	36x6 S	40x12 S
†*White 58	3	4400	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	I G	49.5	D	A	180	7400	36x5 S	36x5 S D
†White 60	1	1850	Own 2 A	6	3½x4½	29.4	Pw	Zen	Vac	Rem	Own	U	3	Own	Sp	17.9	4	D	138	3562	30x5	30x5
†White 61	1½	2450	Own 2 A	6	3½x4½	29.4	Pw	Zen	Vac	Rem	Own	U	4	Own	Sp	23.4	4	D	148	4612	30x5	30x5 D
Willys-Knight 15	1½	1545	Own K G T	6	2⅛x4⅜	20.7	Pb	Til	Vac	Aut	Ful D U	U	3	Eat 1002	Sp	24.3	4	R	134	3300	30x5	32x6
Willys-Knight 16	1½	1595	Own K G T	6	2⅛x4⅜	20.7	Pb	Til	Vac	Aut	Ful D U	U	3	Eat 1002	Sp	24.3	4	R	151	3400	30x5	32x6
Willys-Knight 20	2	1945	Own K G T	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful D U	U	3	Eat 1504	Sp	28.4	4	R	150	3800	32x6	34x7
Willys-Knight 21	2	1995	Own K G T	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful D U	U	3	Eat 1504	Sp	28.4	4	R	164	3900	32x6	34x7
Willys-Knight 25	2½	2545	Own K G T	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful G U	U	4	Wis 6617 B	D R	30.3	4	R	150	4920	32x6	32x6 D
Willys-Knight 26	2½	2595	Own K G T	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful G U	U	4	Wis 6617 B	D R	30.3	4	R	164	5020	32x6	32x6 D

GENERAL NOTATIONS

*†REFERENCE MARKS apply to individual lines only and explanations are given under the subdivision for each company in the "SPECIAL NOTATIONS."

CAPACITIES given in this table are in tons of fractions of tons. *Shows maximum allowable gross weight.

TIRE EQUIPMENT where not otherwise indicated is solid.

WHEEL BASES given are standard, but optional wheel bases are available in many cases.

ENGINE—Bud, Buda; Con, Continental; Her, Hercules; Kgt, Knight; Lyc, Lycoming; Wak, Waukesha; Wis, Wisconsin.

LUBRICATION—Pb, pressure lubrication to main and connecting rod bearings; Pw, full pressure lubrication to all bearings, including wrist-pins; P&S, pressure with splash; CS, circulating splash; Sp, Splash.

CARBURETOR—Car, Carter; Hol, Holley; Joh, Johnson; Mar, Marvel; Sch, Wheeler-Schebler; Str, Stromberg; Stw, Detroit lubricator; Til, Tillotson; Zen, Zenith-Detroit.

FUEL FEED—Gra, Gravity; Pre, Pressure; Vac, Vacuum tank; P, Fuel pump, Auto-P, Auto pulse; E, Electric pump.

IGNITION — AB, American-Bosch; Aut, Electric Auto-Lite; Apo, Apollo; Del, Dayton Engine Laboratory; Eis, Eisemann; L-N, Leece-Neville; N-E, North East; RB, Robert Bosch; Rem, Delco-Remy; Spf, Splitdorf.

TRANSMISSION—Br L, Brown-Lipe; Cov, Covert; Ful, Fuller; Mec, Mechanics Machine; Mun, Muncie; W-G Warner Gear.

LOCATION—C, Center, Amid; U, in unit with engine; J, Jackshaft.

REAR AXLE—Cla, Clark Equipment; Col, Columbia; Eat, Eaton; Sal, Salisbury; Tim, Timken; Wis, Wisconsin.

FINAL DRIVE—St, Straight bevel; Sp, Spiral bevel; Wo, Worm; DR Double Reduction; Ch, Chain; IG, Internal Gear.

BRAKES—Js, Jackshaft; R, Rear wheels; D, Drive shaft; 4 Four-wheel: Tr, Transmission; W, Westinghouse air brake.

TIRES—B, Balloon; D, Dual; S, Solid.

SPECIAL NOTATIONS

AMERICAN-LA FRANCE

*Chief model also available as 2½-ton model, 34x7 tire, dual rear, weight 6,400. Price $3,900.

AUTOCAR

†Engines in these models are located under the driver's seat.

DURANT LINE

*Price includes panel body.

GENERAL MOTORS TRUCK LINE

*Capacity given in all cases is maximum allowable total gross weight (straight rating), and includes chassis, cab, equipment, body and load.

Model T-19 is also available in three other types, with 145¾-inch wheel base having same straight ratings and standard tire combinations as listed for the 127¾-inch wheel base types shown in the table.

Model T-30 is also available in six other types, with 152 and 164 inch wheel bases, respectively, having same straight ratings and standard tire combinations as listed for the 136-inch wheel base types shown in the table.

Model T-42 is also available in nine other types, with 152, 164 and 175 inch wheel bases, respectively, having same straight ratings and standard tire combinations as listed for the 136-inch wheel base types shown in the table.

Model T-60 is also available in nine other types, with 160, 180 and 200 inch wheel bases, respectively, having same straight ratings and standard tire combinations as listed for the 140-inch wheel base types shown in the table.

Optional rear axle gear ratios are available for all types and optional tire equipment is available for all types except Model T-11-1001.

FLEET-ARROW LINE

*Model F. A. 1 is also available as Model F. A. 2, at $2,500 on wheel base of 160 inches, weight 3,975 lbs., and as Model F. A. 3, at $2,550, with seven speed transmission, on 180-inch wheelbase, weight, 3,985 lbs.

GRAMM

*Models B, C, D and E are furnished in three wheel base lengths—others on request.

*Model T Series—Larger engines, pneumatic tires and special wheel bases, and 8 speed transmissions—optional at extra cost.

Model "GY"—190 and 210 in. wheel bases.
Model "HY"—210 and 236 in. wheel bases.
*Model "HY"—210 and 236 in. wheel bases. Tire sizes and electrical equipment optional, depending upon type of service—Coach or Van.

*Above models are all built in tractor wheel base lengths for semi-trailer use.

HAHN LINE

*Model 23 also available as Model 26, priced $1,495, on 144-inch wheel base, with Buda H. S. engine, 6-cyl. 3⅜x4½ inches rated 27.3 h.p., weight 3,200 lbs.

*Model 34 also available as Model 36, with Buda H. S. 6 engine (described above), weight 3,850 lbs.

*Model 44 also available as Model 46, priced $2,410, on 156-inch wheel base, with Buda H. S. 6 engine, as in Model 26, weight 4,200 lbs.

†Model 56 also available on 171-inch wheel base.

INTERNATIONAL HARVESTER LINE

*Model HS-54 also available in the following wheel bases, 130-inch tractor, 170, 185 and 200-inch.

*Model HS-54-C also available in the following wheel bases, 130-inch tractor, 170, 185 and 200-inch.

†Frame is reinforced with inserted channels in each side rail, extending from dash to rear end.

*Model HS-74 also available in the following wheel bases, 144-inch tractor, 185, 210 and 235-inch.

*Models HS-74-C and HS-104-C also available in the following wheel bases, 146-inch tractor, 185, 210 and 235-inch.

All Model HS heavy-duty International truck models are equipped with built-in vibration dampered clutches.

LARRABEE

*Note—Bevel gear, worm or double reduction drive rear axle available in models 40 and 50. Bevel or double reduction axles available in 30. Worm axles in 60, 70 and 80. Three or more wheel bases in each model. All Larrabee models have hydraulic brakes: 40 up have vacuum booster.

MACK LINE

Other wheelbases furnished on all truck models.
On 6-wheel jobs, 4 rear wheels driven by chains, foot brake on 4 rear wheels.
Hyp.—Hypoid drive, single reduction.

PIERCE-ARROW LINE

*Model FA1 also available as Model FA2, at $2,550 on 160-inch wheel base, weight 4,150 lbs., and also as Model FA3, at $2,250 on 180-inch wheel base, weight 4,200 lbs.

*Model XA1 also available as Model XA2, at $3,550 on 162-inch wheel base, weight 6,800 lbs.

*Model XB1 is also available as Model XB2, at $3,800 on 180-inch wheel base, weight 6,900 lbs.

*Model HB1 is also available as Model HB2, at $4,550 on 180-inch wheel base, weight 8,500 lbs., and also as Model HB3, at $4,600 on 198-inch wheel base, weight 8,700 lbs.

*Model WC1 is also available as Model WC2, at $5,150 on 180-inch wheel base, weight 8,950 lbs., and also as Model WC2, at $5,250 on 198-inch wheel base, weight 9,050 lbs.

*Model RD1 is also available as Model RD2, at $5,450 on 180-inch wheel base, weight 9,650 lbs., and also as Model RD3, at $5,500 on 198-inch wheel base, weight 9,750 lbs.

*Model RF1 is also available as Model RF2, at $5,650 on 204-inch wheel base, weight 10,500 lbs.

†Seven-speed transmission also available.

REPUBLIC LINE

*Model 75-4 also available as Model 75-6, priced $1,495, on 128-inch wheel base, with Lycoming 4SL engine, 6-cyl. 3¼ by 4½ inches, rated 25.3 h.p., weight 3,150 lbs.

*Model 76-4, also available as Model 76-6, priced $1,675, on 150-inch wheel base, with Lycoming 4SL engine, as in Model 75-6, weight 3,500 lbs.

†Model 60-61, also available with four-wheel brakes, $3,155.

**Model 62, same as 60-61, on 171-inch wheel base, $3,040.

†Model 25W-25WRB available with four wheel brakes.

**Model 66, same as 65, on 200-inch wheel base, $3,750.

**Model 25W, 25WB and 25WBR also available in 3½-ton capacities as Models S25W, S25WB and S25WRB on wheel bases of 165, 156 and 124 inches, priced $3,695.

**Models 35 and 35B also available in 5-ton capacities on wheel bases of 179 and 157 inches, priced $5,145.

**Model 85 also available as Model 86 on 170-inch wheel base, price $2,150.

**Model 50-51 also available as Model 52 on 170-inch wheel base.

REO LINE

*Tonner in wheel base, 123, 138; 1½-ton in wheel base, 137, 156, 152; 2-ton in wheel base, 152, 168; 3-ton in wheel base, 168, 179, 184.

RUGBY

F—Chassis weight includes body.

STEWART LINE

*Buddy 1-ton can be supplied in 138-inch wheel base.

*Models 16 and 16X can be supplied in 145-inch and 160-inch wheel base.

Model 28X can be supplied in 146, 160 and 176 inch wheel base.

Model 29X can be supplied in 160 and 176 inch wheel base.

*Model 26XW can be supplied in 148, 176 and 190 inch wheel base.

*Model 18X can be supplied in 148, 190 and 220 inch wheel base.

*Models 19X and 22X can be supplied in 148, 172, 190, 220 and 235 inch wheel base.

WHITE LINE

*Bus Model 52 is equipped with Booster Brakes and 50B and 54 with air brakes. Model 58 with air brakes as optional equipment.

Model 60 gross weight capacity, with 32x6 tires, 8,000 lbs.; 34x7.50 balloon tires optional at extra cost.

†Supplied in optional wheel bases.

FORD LINE

*Low speed axle 22.6 to 1.

DISTRIBUTION
SHOP EQUIPMENT
REPLACEMENTS

WHOLESALE

MERCHANDISING
ACCESSORIES
EQUIPMENT

Space Alloted for 11th Annual M. E. A. Show at Chicago

KEEN INTEREST IS MANIFESTED

180 Manufacturers' Representatives at Space Drawing

CHICAGO, Sept. 19. — Space for the eleventh annual automotive equipment show, which will be held in the Coliseum, November 4-9, was alloted at a drawing held by the Motor and Equipment Association in Chicago.

A total of 180 manufacturers' representatives were present with the M. and E. A. show committee, which is composed of T. I. Jenks, Pittsburgh Auto Equipment Company; W. G. Hancock, McCord Radiator Company; Fred Campbell, Campbell Auto Supply Company; George Brunner, Brunner Manufacturing Company, and M. C. DeWitt, chairman, Champion Spark Plug Company.

Keen interest in the forthcoming show, according to A. B. Coffman, show manager, was evinced by every one present, and indications are that the eleventh annual show will be the best attended in the history of accessory shows.

Those assigned space are as follows:

American Chain Company, Inc., Bridgeport, Conn.; Automotive Maintenance Machinery Company, Chicago; Albertson & Co., Sioux City, Iowa; Allbestos Corporation, Philadelphia; American Automatic Devices Company, Chicago; Automotive Daily News, New York; Anderson Company, Gary, Ind.; Acme White Lead and Color Works, Detroit; American Bosch Magneto Corporation, Springfield, Mass.; AC Spark Plug Company, Flint, Mich.; Auto Specialties Manufacturing Company, St. Joseph, Mich.; Apco Mossberg Corporation, Attleboro, Mass.

Allen Electric and Equipment Company, Kalamazoo, Mich.; American Hammered Piston Ring Company, Baltimore, Md.; Bastian-Blossing, Company, Chicago; Bunting Brass and Bronze Company, Toledo; Burgess Battery Company, Chicago; Black & Decker Manufacturing Company, Towson, Md.; Bussmann Manufacturing Company, St. Louis; Berry Brothers, Detroit; Blackhawk Manufacturing Company, Milwaukee; Badger Rubber Works, Cudahy, Wis.; Brunner Manufacturing Company, Utica, N. Y.; Berger Manufacturing Company, Canton, O.; Binks Manufacturing Company, Chicago; Burgess-Norton Manufacturing Company, Geneva, Ill.; Burton Rogers Company, Boston, Mass.; Bonney Forge and Tool Works, Allentown, Pa.; Biflex Products Company, Waukegan, Ill.; Crescent Tool Company, Jamestown, N. Y.; Champion Spark Plug Company, Toledo, O.; The Carborundum Company, Niagara Falls, N. Y.; Columbus McKinnon Chain Company, Tonawanda, N. Y.; Cooper Manufacturing Company, Marshalltown, Ia.; Clifton Manufacturing Company, Waco, Tex.; Chain Products Company, Cleveland; Curtis Pneumatic Machinery Company, St. Louis; Continental Rubber Works, Erie, Pa.; Columbian Vise and Manufacturing Company, Cleveland; Casco Products Corporation, Bridgeport, Conn.; Crawford Manufacturing Company, Richmond, Va.

Dover Stamping and Manufacturing Company, Cambridge, Mass.; E. I. du Pont de Nemours Company, Detroit; DeVilbiss Company, Toledo, O.; Durkee-Atwood Company, Minneapolis; Delta Electric Company, Marion, Ind.; Edison Lamp Works of General Electric Company, Harrison, N. J.; E. Edelmann Company, Chicago; E. A. Laboratories, Inc., Brooklyn, N. Y.; The Fulton Company, Milwaukee; Francisco Auto Heater Company, Columbus, O.; Federal Mogal Corporation, Detroit; Fitzgerald Manufacturing Company, Torrington, Conn.; French Battery Company, Chicago; Fleming Manufacturing Company, Worcester, Mass.; Flower City Specialty Company, Rochester, N. Y.

Globe Machinery and Stamping Company, Cleveland; Gates Rubber Company, Denver; L. H. Gilmer Company, Philadelphia; Goodrich-Lenhart Company, Hamburg, Pa.; Globe Machinery and Supply Company, Des Moines, Ia.; Globe Manufacturing Company, Battle Creek, Mich.; Hardie Manufacturing Company, Hudson, Mich.; Hall Manufacturing Company, Toledo; John C. Hoof & Co. Chicago; Hinson Manufacturing Company, Waterloo, Ia.; Harvey Spring and Forging Company, Racine, Wis.; Halstead Oil Company, New York; Hayes Pump and Planter Company, Galva, Ill.; Ernest Holmes Company, Chattanooga, Tenn.; J. C. Haartz Company, New Haven, Conn.; Hutto Engineering Company, Detroit; Hall-Thompson Company, Hartford, Conn.; Imperial Brass Manufacturing Company, Chicago; I-Sis Laboratories, New York; Illinois Iron and Bolt Company, Carpentersville, Ill.; Johns-Manville Corporation, New York.

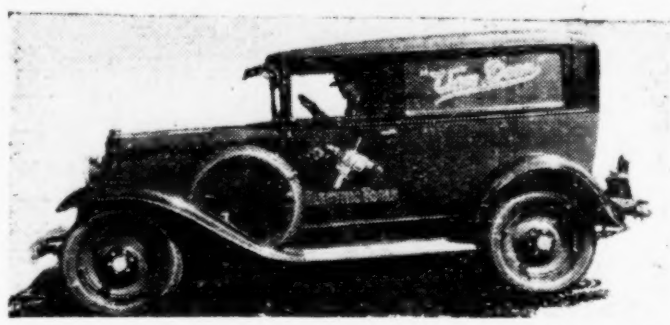
King Quality Products, Indianapolis; Klaxon Company, Anderson, Ind.; Kales Stamping Company, Detroit; Kennedy Manufacturing Company, Van Wert, O.; K-W Ignition Company, Cleveland; Kellogg Manufacturing Company, Rochester, N. Y.; Kant Rust Products, Rahway, N. J.; David Lupton's Sons Company, Detroit; Lincoln Paint and Color Company, Lincoln, Neb.; Lyon Metal P;roducts, Inc., Aurora, Ill.; Las-Stik Manufacturing Company, Hamilton, O.; Lawson Rubber and Manufacturing Company, Dallas; Manley Manufacturing Company, Bridgeport, Conn.; Motor Service, Chicago; Moto-Meter Company, Long Island City, N. Y.; Metal Specialties Manufacturing Company, Chicago; Millers Falls Company, Chicago; Manufacturers Auto Equipment Company, Pasadena, Cal.; Multibestos Company, Walpole, Mass.; Marquette Manufacturing Company, St. Paul, Minn.; Morrison Jack Company, Alliance, O.

McCord Radiator and Manufacturing Company, Detroit; McQuay-Norris Manufacturing Company, St. Louis; McAleer Manufacturing Company, Detroit; Noblitt-Sparks Industries, Indianapolis; National Lamp Works of General Electric Company, Cleveland; National Carbon Company, Long Island, N. Y.; Neora Manufacturing Company, Waterbury, Conn.; National-Standard Company, Niles, Mich.; Perfect Circle Company, Hagerstown, Ia.; Packard Electric Company, Warren, O.; Pyrene Manufacturing Company, Newark, N. J.; Piston Ring Company, Muskegon, Mich.; Protexall Company, Abingdon, Ill.; Charles Parker Company, Meriden, Conn.; Perfection Gear Company, Chicago; William E. Pratt Company, Chicago; Frank Rose Manufacturing Company, Hastings, Neb.; Reliance Manufacturing Company, Massillon, O.; Russell Manufacturing Company, Middletown, Conn.; Romort Manufacturing Company, Oakfield, Wis.; Rottler Boring Bar Company, Seattle, Wash.; Raybestos Company, Bridgeport, Conn.; G. A. Roth Manufacturing Company Hastings, Neb.; Rees Manufacturing Company, Pittsburgh.

Spencer Smith Machinery Company, Howell, Mich.; Storm Manufacturing Company, Minneapolis, Minn.; Sparks-Withington Company, Jackson, Mich.; Stiles-Herman Manufacturing Company, St. Louis; Sewall Paint and Varnish Company, Kansas City; South Bend Lathe Works, South Bend, Ind.; Shaler Company, Waupun, Wis.; Splitdorf Electrical Company, Newark, N. J.; Scully Steel and Iron Company, Chicago; Service Station Equipment Company, Bryan, O.; A. Schrader's Sons, Inc., Brooklyn, N. Y.; The Simoniz Company, Chicago; Smith Welding Equipment Company, Minneapolis, Minn.; Schroeder & Tremayne, Inc., St. Louis; L. S. Starrett & Co., Athol, Mass.; Stevens Walden-Worcester Company, Worcester, Mass.; Spraco, Inc., Somerville, Mass.; Thompson Specialties Company, Springfield, Mass.; Trainor National Spring Company, New Castle, Ind.; Thomas Auto Top Company, Muncie, Ind.; Trico Products Corporation, Buffalo, N. Y.; Tingley Reliance Rubber Company, Rahway, N. J.

Thermoid Rubber Company, Trenton, N. J.; Thompson Products, Inc., Cleveland; Toledo Steel Products Company, Toledo; Thompson Neaylon Manufacturing Company, Chicago; United States Air Compressor Company, Cleveland; Victor Manufacturing and Gasket Company, Chicago; Van Norman Machinery Company, Springfield, Mass.; Vellumoid Company, Worcester, Mass.; Van Dorn Electrical Company, Cleveland; Vedoe Peterson Company, Quincy, Mass.; Vlchek Tool Company, Cleveland; J. H. Williams & Co., Buffalo, N. Y.; Weaver Manufacturing Company, Springfield, Ill.; Wilkening Manufacturing Company, Philadelphia; Walker Manufacturing Company, Racine, Wis.; Watervliet Tool Company, Albany, N. Y.; White & Bagley Company, Worcester, Mass.; Westinghouse Lamp Company, New York; Warner Patterson Company, Chicago; Whitaker Battery Supplies, Kansas City, Mo.; Wedler-Shuford Company, St. Louis; Joseph Weidenhoff, Inc., Chicago; Willis-Jones Machinery Company, Seattle, Wash.; Wheel Parts and Manufacturing Company, Chicago; "X" Laboratories, New York; Yankee Metal Products, New York.

Van Dorn's Demonstration Car



The Van Dorn Electric Tool Company of Cleveland is now uring a new electric tool demonstration car to assist the jobbers' salesmen in demonstrating various Van Dorn tools in operation.

This car consists of an especially designed closed body mounted on a chassis of one of the well known car manufacturers. The large rear door, when opened, shows the various electric tools in neatly arranged sections making them accessible for immediate use. This enables the salesmen to bring the tools to users so that they can prove for themselves the merits of the product.

At the present time, this car is being received enthusiastically by the trade in Maryland and Virginia so that arrangements have been made to send it or similar cars to all parts of the United States.

Editor's Column

IT is generally supposed that salesmen are "born and not made," inasmuch as a good salesman is said to be gifted with the ability to talk and to take conversational advantage of every opportunity which presents itself.

To some degree this is pretty accurate and the jobber's salesman with the "gift of gab" gets better than an even break. But what are salesmen to say in these days of hand-to-mouth buying, when customers are putting in orders for a twelfth-of-a-dozen and standing pat on the order?

If the buyer says "No," short and ugly, there isn't much any salesman can say, but if the buyer follows up with an excuse, he leaves himself open to a snappy answer.

There may be a dozen or so varieties of buyers' stalls but most of them can be defeated with one of these comebacks:—

1. "See me next trip."

One of the most practical answers to this runs along these lines; "I will be around here again in two months. In the meantime, advertisements for our line will appear in 7,300,000 copies of national magazines.

"In this city, one out of every seven people wil buy about $2 worth of our line. That business will be divided among your customers. I may not get back here for more than two months. What then? How do you know your stock will last two months?"

2. "I'll stock them when my customers ask for them."

And an automobile accessory salesman replied: "Ever have a call for Cadillac cars?"

"Why, no," said the garage man.

"Well," said the salesman, "if you put out a sign, 'Cadillac Dealer' you'd get some calls wouldn't you? How do you expect to get calls for products you don't stock, don't display, don't push?"

3. "There's no demand for your brand right now."

Another stall, most likely. This one can only be answered by a few accurate facts. The live salesman can quote experiences of other dealers in the same territory who have a demand for the product "right now." In most cases this will wake the dealer up. At least it takes the teeth out of his pointless claim.

4. "Jones gives me longer credit terms."

"Yes," replies the sales manager, "and if that's what's keeping you in business you had better apply to the lowest-down, least-known, longest-profit manufacturer in the field; he'll most likely give you credit terms the like of which you never even imagined!"

5. "My customers are satisfied with my present line."

"Yes, and they'll be even better satisfied with a better product. Every customer is grateful to the dealer who gives him a better book, a better cigar, a better shoe or a better suit. Don't tell me your stock has reached perfection!"

6. "I want the exclusive dealership."

Careful study has shown that the more stores which handle any given product in a locality, the more "calls" there are for that product. A large store in the Middle West refused to handle a dollar accessory, but the small store took it up. In a short time the large store had so many "calls" it was practically forced to handle the line. Don't let them bluff you with the "only me" idea.

7. "I have too many brands now. I must keep down my investment."

This is sometimes too easy an excuse for the salesman to swallow. A garage man said: "Up to a couple of months ago I was handling five brands of tires. A smart salesman got me to drop them all and take on his line of expensive tires and one cheap make. I find my customers accept my two lines just as they used to take the whole five, and I have cut my inventory and consequently my overhead."

8. "I'm all stocked up on your goods now."

Every house should train its salesmen to work hard on this one—it might be true. If the dealer is really loaded, the salesman should be instructed to use all the means in his power to get things moving. A sincere desire to help will automatically uncover the truth of affairs, for, in the face of it, the dealer cannot refuse to give facts and figures. "Never," says one salesman, "let anybody hand you this excuse without telling you how much stock he has on his shelf."

Wholesale Brevities

Hackensack, N. J., Sept. 19.—The Standard Motor Parts, automotive jobber, has taken over the entire building at 297 Main St. here for its own use. Additional stock made necessary by the huge increase in business is given as the reason. The second floor is being used for offices.

Howard Pfeiffer, buyer, has appointed Hap Duryea as his assistant. George Stewart and Harry Warner are the new countermen.

Seattle, Wash., Sept. 19.—W. C. Krause, pioneer automotive salesman with Ballou & Wright, having served in various capacities with that firm for sixteen years, is seriously ill at his home in this city.

CLARK

Now SEE Them

exhibited at the Electric Railway Association Convention (Space 332) in Atlantic City September 28 to October 4—

CLARK AXLES and METAL WHEELS

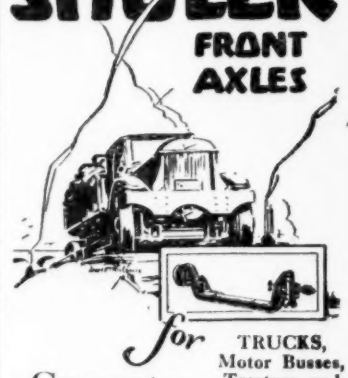
For MOTOR BUSES and TRUCKS

CLARK EQUIPMENT COMPANY

Buchanan Michigan

AXLES
Front & Rear
WHEELS
Single or Dual Tire
CAST STEEL HOUSINGS
TRANSMISSIONS

SHULER
FRONT AXLES



for TRUCKS, Motor Busses, Tractors and Trailers

Guarantee of Service

Service is an unfailing gauge of worth and standing.

Shuler, like all other names linked with Industry and Business, must stand or fall on Service.

FRONT AXLES ONLY

With or Without Brakes

SHULER AXLE CO.
INCORPORATED
LOUISVILLE KENTUCKY
MEMBER OF MOTOR TRUCK INDUSTRIES, INC. OF AMERICA

Tide Water Oil Co. Buys Three Chains of Service Stations in N. Y. and N. J.

Bayonne, N. J., Sept. 19.—Two of the large oil companies here have added to their Eastern properties. The Tide Water Oil Company, subsidiary of the Tide Water Associated Oil Company, has purchased three chains of service stations, located in Brooklyn, Newark and Asbury Park, respectively.

The three service stations taken over are the Essanarr group of thirteen depots operating in Brooklyn; the Service Oil Company of Asbury Park, comprising eight stations, and the Royal Oil Company of Newark, comprising eight stations.

The latest acquisitions of the Tide Water Oil Company bring the total outlets of the company in Eastern territory above 400, it is stated. The company is understood to have spent about $10,000,000 in expanding its retail distribution service in Eastern areas in the last few months.

The Tide Water Oil Company also has acquired service stations in the Bradford district of Pennsylvania and will erect a bulk station in that territory.

The Atlantic Refining Company has purchased a chain of twenty service stations in New Jersey heretofore operated by the Pacific Refining Company and will take them over on October 1.

GENERAL MOTORS BUYS NORTH EAST ELECTRIC

(Continued from Page 1)

gan the manufacture of generators for the automobile lighting system, and a month later, one year from its founding, the Rochester Coil Company became the North East Electric Company, with authorized capital stock of $125,000.

Within a few years the company had acquired other plants, to accommodate its rapidly expanding manufacturing business, occupied total floor space of 700,000 square feet, was rated as the third largest employer of labor in Rochester, and had developed a service organization. North East Service, Inc., which looked after the distribution and servicing of its products, maintaining more than 1,800 branch offices in all parts of the world.

Another development in accord with the progressive policy the company effectuated from the first was a well equipped service school in Rochester.

From its first venture in the production of lighting system generators, the company branched into the manufacture of many and varied equipments and accessories for automobiles, trucks, passenger cars, motor boats and the like. Numbered among its products are starters, generators, ignition, horns, speedometers, cowl-board attachments and novelties.

Last month the company announced the formation of the Societe Anoxyme Belge North East, with an office in Antwerp, Belgium, to serve as a North East parts depot and make shipments throughout Continental Europe.

In 1919, North East increased its capital stock from $1,000,000 to $3,000,000, and again, in 1920, from $3,000,000 to $6,000,000.

In the past summer the stockholders voted approval of a proposal to acquire all common stock of North East Service, Inc., the distributing corporation for the company's products, and to issue 50,000 additional common shares to provide for the purchase.

REYNOLDS SPRING MAKES PROFIT IN FIRST HALF

New York, Sept. 19.—The report of Reynolds Spring Company and subsidiaries for six months ended June 30, 1929, shows profit of $127,651, after depreciation and interest, comparing with $3,584 in the first half of 1928.

For the quarter ended June 30, this year, profit after depreciation and interest was $81,829, comparing with profit of $45,822 in preceding quarter and loss of $2,401 in June quarter of 1928. Capital stock outstanding amounts to $108,100 (par $100) class A 7 per cent. preferred, $17,400 (par $100) class B 7 per cent. preferred and 495,220 no-par shares of common stock.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

CUMULATIVE NEW PASSENGER CAR REGISTRATION TABLE, AUGUST, 1929

Some of this data has been published previously, but it is given here complete for the convenience of our subscribers.

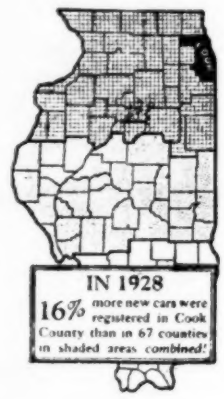
Returns for today: Arkansas, Rhode Island and South Carolina

States	Auburn	Black Hawk	Buick	Cadillac	Chevrolet	Chrysler	DeSoto	Dodge	Durant	Elcar	Erskine	Essex	Ford	Franklin	Gardner	Graham-Paige	Hudson	Hupmobile	Jordan	La Salle	Lincoln
Arkansas	2		91	3	992	61	44	89	28		3	55	1515	3		26	17	12		9	1
Delaware	8		190	5	134	4	3	7	22			23	306	3		2	17	6		3	1
Illinois	180	14	1734	94	4091	541	382	570	178	10	35	876	8071	46	16	444	381	252	10	142	57
Maryland	11	2	357	10	1036	114	45	108	58		2	182	1812	15		76	63	75	3	11	5
N. Dakota	2	1	36		264	20	10	17	18		1	27	586			11	11	2		2	2
Rh. Island	22		175	18	304	87	80	78	18		1	110	429	16	2	50	35	35		25	9
S. Ca'lina			114	1	967	40	31	22	8		3	45	1653	5		7	40	13		5	
S. Dakota	6	1	69		595	29	14	68	47		9	68	920	1		27	23	27		2	
Utah	6		91	2	271	25	19	24	61		2	48	536	3		32	15	13		5	1
W. Va.	7	5	159	6	889	85	56	121	33		3	140	1393	4		91	45	30	1	11	4
Wisconsin	9	1	613	6	1506	143	101	180	86	6	18	338	2824	15		137	178	78		8	14

States	Locomobile	Marmon	Marquette	Nash	Oakland	Oldsmobile	Packard	Peerless	Pierce-Arrow	Plymouth	Pontiac	Reo	Roosevelt	Stearns-Knight	Studebaker	Stutz	Viking	Whippet	Willys-Knight	Windsor	Miscellaneous	Totals
Arkansas		2	10	43	7	18	2		4	93	82	6	6		28			97	10			3362
Delaware			5	30	14	14	26	1	1	19	32		2		20		1	19	4			832
Illinois		44	131	812	218	717	461	89	50	570	1165	90	123	8	753	17	55	771	186	7	300	24,716
Maryland		10	41	116	25	405	83	5	14	84	213	16	16		89	2	5	123	32		1	5,015
N. Dakota		3	10	24	10	27	4		1	37	35	1	10		15	1	2	86	17			1,293
Rh. Island		3	14	71	11	54	52	11	9	43	114	24	10	2	64		4	51	44		30	2110
S. Ca'lina		1	15	23	11	27	19		1	47	72	2	8		13		4	50	1			3248
S. Dakota		6	13	34	11	96	4			95	84	1	4		30		5	125	15	2	2	2,433
Utah		2	3	29	3	42	11			17	30	2	4		34	2	2	24	5			1,364
W. Va.		8	33	83	27	96	40	1	3	102	145	22	32		80	2	6	158	38			3,959
Wisconsin		16	61	286	62	221	64	10	25	243	404	16	34		221	3	15	293	57	5	14	8,311

"No Hill too Steep . . ."

We feel that we may be forgiven for adopting momentarily a once-famous slogan, for we are climbing steeply to gratifying heights in automotive linage. We are not only on our way, but we know where we are going, and increasingly the leaders of the automotive world are adding to our impetus. As witness:



GROWTH OF AUTOMOTIVE LINAGE IN CHICAGO DAILY PAPERS, 8 MONTHS, 1929

CHICAGO EVENING AMERICAN	150,610 Lines	GAIN
Second Paper (Morning) - - - -	106,621 "	"
Third Paper (Evening) - - - -	98,390 "	"
Fourth Paper (Morning) - - - -	57,025 "	"
Fifth Paper (Evening) - - - -	12,491 "	"

CHICAGO EVENING AMERICAN

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